PULP & PAPER

FEBRUARY 1949
Vol. 23 No. 2
Member Audit Bureau of Circulations
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The Production and Management Journal Covering North America's Wood Pulp, Paper, Paperboard and Cellulose Industries

by MILLER FREEMAN PUBLICATIONS, INC.

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SUBSCRIPTION inc. North American Review Number—$3 for 1 yr. and $5 for 2 yrs. in U. S., Canada, Mexico and other member nations of Pan-American Union ($4 for 1 yr. and $7 for 2 yrs. in other countries).

"The Cellulose Age"

EDITORIALS

"The business philosophy of our corporation divides itself broadly in two categories: (1) we must manufacture our products at highest quality possible, and (2) through research create new products which fit a need. Only by following these principles can any business grow, enjoy proper earnings and maximum employment at high wages."—Ernst Mahler, Executive Vice President, Kimberly-Clark Corp.

Now Is the Time—

This editorial comment in the Mead Corp.'s "Paper News" seems worth consideration:

"We pass along for your interest the latest directive to descend upon our office from up the line: 'Don't talk about paper shortages any more. Not even spot shortages!'

"Right on top of that we note that the candy people and the growers of citrus fruit are burdened with over-production and are struggling to interest more customers. We discover by personal experience that tire prices have not followed the trend of automobile prices but are actually lower than a year ago. A friend comes in gleefully to report getting 33⅓% off when purchasing a sizable order of furnishings for his home.

"Well, these are only spots here and there, but it appears to us as if the country's beginning to break out in a rash of them. If this be so, the long-lost buyer's market is at hand, and now is the time for all good manufacturers to get out letters, booklets, catalogs, folders and other printed salesmen. Business slow? Start something!"

More About Gobbledydonk—or Gobbledygook

Our editorial on "Gobbledydonk in Technical Papers" created considerable amused comment, but apparently we were beaten to the punch by the Tileston and Hollingsworth Bulletin issued by that well known paper company in the stronghold of the English language, Boston. But the T & H Bulletin prefers to call it "gobbledygook" and quotes considerably from a contemporary of ours. "It is more true of the technical articles," the Bulletin says, "but even the editorials are not free of gobbledygook" and he adds darkly, making us nervous, "as we shall see a little later on."

"We were pleased to see your editorial," writes Mr. Thomas P. McDonnell, editor for the Bulletin, "and you might be interested in what we have said about gobbledydook previously." He adds that he has always admired **PULP & PAPER** as perhaps the finest of the paper trade journals. Returning the compliment, we can say that Mr. McDonnell really pins down what "gobbledygook" is. It is "too much wordiness, confusion in writing, and a dense fog in the atmosphere of thought. This disease of fouled-up writing has infected government, business, and law."

All a reader asks, says Mr. McDonnell plaintively, is to be talked to as a person, not as an interpreter of hieroglyphics. That's what we try to do, and if any reader ever catches us simply trying to fill space we hope he'll holler loud.

Appeal from Soviet Rumania

From Jassy (Iasi), Rumania, Soviet satellite country, **PULP & PAPER** has received an appeal for scientific publications from this country.

The "Bulletin" of l'Ecole Polytechnique de Jassy, in Jassy (Iasi), Rumania, requests that pulp and paper institutions and laboratories in North America send to the Jassy institute "reprints, books and treatises to repair losses in our library" and original papers for publication in the "Bulletin" or the University of Jassy's "Scientific Review."

We just wonder what kind of help they are going to get from behind the iron curtain?

Or, would it be too fantastic to presume that this request is really in behalf of the U.S.S.R.?

Salute to the Splicers

Recently a large delegation of paper industry representatives had the privilege of visiting the Lockport Felt Co., Newfane, New York, an organization which has been serving the paper and pulp industry since 1891. The making of a felt, from the inspection and grading of the wool, to the final product is a fascinating process. But perhaps the most interesting of all the steps in the manufacture is the work performed by the splicers.

The splicers are women—women chosen for their skill and patience. Their job, as the name implies, is to splice the felt—to so accurately join the ends of the felt that the splice cannot be detected. No machine has ever been devised to do this with the accuracy and srength needed in the joining of a paper machine felt. It is not likely that such a machine will ever be produced.

Great romance has been attached to loggers, to the men who get the pulpwood out of the forests, and they deserve the attention they have received. Due attention has been given to technical research men, to machine builders, and to all the great army of men who make pulp and paper. But these hard-working and conscientious ladies called splicers deserve some recognition, too. All the pulpwood, all the chemicals, all the great machines, all the brains of men, could not produce one pound of paper without them. So, ladies, the industry salutes you!

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COAST AND EAST REPRESENTATIVES

JOHN V. ROSLUND (left), moves to Portland, Ore., to cover the Pacific Coast territory for Asten-Hill Mfg. Co., H. Waterbury & Sons Co., and Downington Mfg. Co.

KENNETH D. HAY (right), will be his successor in the Eastern territory for Asten-Hill. He was formerly with Peter J. Schweitzer, Inc.

John V. Roslund, with Asten-Hill Mfg. Co., Philadelphia, for ten years in the East, leaves their direct employ to become representative for them, H. Waterbury & Sons Co., Oriskany, N. Y., and Downingtown Mfg. Co., of Downingtown, Pa., on the Pacific Coast.

Kenneth D. Hay, formerly with Peter J. Schweitzer, Inc., Spotswood, N. J., joins Asten-Hill to cover the Eastern territory which Mr. Roslund leaves. He is a graduate of Tufts College.

Mr. Roslund was in the Paper Mill Division of S. K. F. Industries, N. Y., then with Baker Mfg. Co., Saratoga Springs, as chief engineer in charge of the design of pulp and paper mill machinery, before coming to Asten-Hill. He was also former sales and service engineer for Moore & White Co. Born in Sweden, he was "brought up" in paper making. He has lived in the U. S. for 30 years.

JAMES E. KEARNEY (left), whose promotion to Manager of Swenson Evaporator Division of Whiting Corp., is announced by G. E. Seavoy, who formerly held that position and recently was himself promoted to Vice President of Whiting in charge of field sales of all lines. Mr. Kearney, graduate of U. of Missouri, was project engineer with H. K. Ferguson Co. before joining Swenson in 1943.

DR. ROBERT A. BAUM (right), of Pomona, Calif., whose appointment as West Coast Representative of the Specialty Products Division of Bulkley, Dunton Pulp Co., is announced by Fred Enders, President. Dr. Baum, who was formerly Technical Director at Fernstrom Paper Mills, will sell and service the Sveen-Pederson Saveall.

Photos by PULP & PAPER.

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COMING INDUSTRY MEETINGS

Southern Pulpwood Conservation Assoc. — Atlanta-Biltmore Hotel, Atlanta, Ga. .....Feb. 9

Southern Forestry Conference — Montgomery, Ala.....Feb. 18-19

American Paper & Pulp Assn. (Annual Convention) — Waldorf-Astoria, New York.....Feb. 20-25

U. of Maine Alumni Luncheon — Commodore Hotel, N. Y.....Feb. 23

Tech. Assn. Convention— Commodore Hotel, New York..... .....Feb. 21-24

Del. Valley Tech. Section—Engineers Club, Philadelphia.....Mar. 24

American Institute of Electrical Engineers — Statler Hotel, Buffalo, N. Y. .....April 11-12

National Corrosion Engineers Ass'n. Exhibit—Netherland-Plaza Hotel, Cincinnati, O.....April 11-14

FAO-United Nations Conference on World Pulp—Montreal.....April 25

National Coating Convention— Grand Rapids, Mich.....Apr. 26-28

Packaging Machinery Institute (Spring Meeting)—Hotel Dennis, Atlantic City, N. J. .....May 9

National Packaging Show—Public Auditorium, Atlantic City..... .....May 10-13

Canadian Pulp & Paper Assoc.— General Brock Hotel, Niagara Falls, Ont.....June 1-3

Supts. Convention — Hotel Haddon Hall, Atlantic City, N. J..... .....June 15-17

National Tech. Ass'n. Fall Meeting— Multnomah Hotel, Portland, Ore... .....Sept. 12-16

Engineers Conference, Statler Hotel, Boston .....Oct. 31-Nov. 3

Pacific Chemical Exposition — Civic Auditorium, San Francisco..... .....Nov. 1-5

Paper Industry Salesmen— Midston House, New York City— Every Monday, 12 noon to 2 p.m.

Allied Industries' Luncheon Club— Second Monday of month, 12 noon, Commodore Hotel, New York.

1949 Will Be "Test" Year, Says Union Bag President

In 1948 the demand for all-kraft paper bags and boxes, in which Union Bag specializes, reached a new high, and the company manufactured the greatest volume of products in its history, according to Alexander Calder, (left), president of Union Bag & Paper Corp.), Woolworth Tower, New York.

Union Bag production was about 380,000 tons of paper, paperboard, bags, and boxes, with net sales amounting to over $75,000,000, Mr. Calder reported. The net sales have increased steadily since 1932 when they stood at a mere $6,422,000.

Said Mr. Calder: "During 1948 the U. S. per capita consumption of paper reached an all-time high of well over 300 pounds annually. This is 30 times the average of the rest of the world. Maintenance of a high level of activity through to the end of 1949 would mean that we had been able to work out labor problems without acrimony, and that we had comprised differences in political and economic theory in the typical American way."

Record Paper Production Established in Year 1948

A new all-time high of 22,150,000 tons of U. S. paper production for 1948, is indicated by preliminary reports of the American Paper and Pulp Association. Pulpwood, wood pulp and waste paper are in good supply. Paper production in 1947 was 21,039,000 tons.

Expansion Program By Central States Paper & Bag

As part of an expansion program, Central States Paper and Bag Co., St. Louis, Mo., bought a plant at Irvington, N. Y., which adds considerable additional space for production of bags and liners. To equip Irvington and add to their St. Louis plant, Central States bought the Mohawk Bag Co. of Niles, Mich., and its specialty bag machines, bundling machines and printing presses.

First News in Egypt

Newsprint is being made for the first time in Egypt, with pulp from Sweden, in a mill in the seaport of Alexandria. It makes 25 tons a day; also five tons a day of straw pulp.

OUR COVER PICTURE . . .

. . . for this month was taken especially for us at the Russell, Mass., mill of the Westfield River Paper Co., one of the important glassine producers of the continent. This mill was built in 1908 and many glassine industry leaders of today had their first start there.

FERGUSON WINS 1949 Gold Medal

Hardy S. Ferguson, who has designed and engineered construction of pulp and paper mills in all regions of North America, will receive the 1949 Gold Medal for achievement from the Technical Association of the U. S. industry during the opening session of the National Convention in the Commodore Hotel in New York Feb. 21. He was voted the honor by the executive committee.

From Savannah, Ga., to Camas, Wash., Mr. Ferguson, who recently celebrated his 80th birthday, has left many monuments of his work. He hails from Maine and Holyoke, Mass. famous "school" for paper mill engineers, but has lived in New York many years, where he heads Hardy S. Ferguson & Co., 200 5th Ave., New York.

Planned Paper Capacity Report for U. S. Up to 1951

The table below summarizes final results of combined: "New Machine Survey" of the Writing Paper Mfg. Ass'n; the "Survey of New Capacity" by the American Paper and Pulp Ass'n; and the "Survey of New Paperboard Capacity" by the National Paperboard Ass'n., issued by APPA:

Capacity in U. S. Pulp & Paper Mills
(Present and Planned Tonnage)

	Paper	*Board*	*Total*
End of 1948 ..	11,801,500	11,438,820	23,240,320
End of 1949 ..	12,244,490	12,080,770	24,325,260
End of 1950 ..	12,508,610	12,108,670	24,617,280

Improvements Continue At Marathon Mill in Canada

A continuing program of improvement is under way at Marathon, Ont., by Marathon Paper Mills of Canada, according to President John Stevens, Jr. No important changes in the manufacturing program or mill capacity have been involved.

Most work involves more electrical power installations, mechanization of woodlands operations and housing. Capacity of the Hotel Everest is being enlarged.

The company employs about 650 men at Marathon apart from woods crews. Woodlands communities have been established at Caramat and Stevens.

Sweezey Says Plans Advance For Alberta Newsprint Mill

R. O. Sweezey, Montreal financier, and associates expect to sign an agreement early this year with the Alberta government covering timber limits and construction of a pulp and newsprint mill in Calgary or Edmonton, Alberta.

Mr. Sweezey says that present plans call for one newsprint machine, daily output 200 tons. Estimated cost of the project is $10,000,000 to $15,000,000.

Mr. Sweezey expects he will find a market for his output from the Rockies to Minneapolis and south to Texas.

NEW INDUSTRY PRESIDENT Noyes Succeeds Leadbetter

ROBERT H. NOYES, Portland, Ore., lumberman, elected successor to the late Frederick W. Leadbetter as President of Oregon Pulp & Paper Co and Columbia River Paper Mills. Mr. Noyes was senior vice president of these companies and a director for more than 25 years.

Robert H. Noyes, of Portland, Ore., became president of Oregon Pulp & Paper Co. and Columbia River Paper Mills in January, the offices having become vacant by death of Frederick W. Leadbetter. Other officers of the organization, continuing unchanged, include Nils G. Teren, vice president in charge of pulp and paper production; W. T. Alexander, vice president in charge of lumber division and sales; H. F. G. Andreae, vice president in charge of credit and purchases; H. M. Youel, secretary, in charge of accounting and financial matters.

Mr. Noyes has been for many years associated in the timber management firm of Holland, Briggs & Noyes, managing such enterprises as Bridal Veil Timber Co., Noyes-Holland Logging Co., and Milton Creek Logging Co. He also has been a principal owner of Row River Lumber Co., and was senior vice president of the paper companies.

Frederick Leadbetter, 80, pioneer in pulp and paper industry along the Pacific Coast, died Dec. 22 in Los Angeles.

Leadbetter Built First Washington State Paper Mill

His extensive activities in pulp and paper included building and operating the first paper mill in Washington State—the Columbia River Paper Mill at Camas in 1883, which later became Crown-Columbia Paper Co. and now is the biggest mill in Crown Zellerbach Corp. He has been credited with developing the Camas community, having originally built the city's power and water systems. Mr. Leadbetter was one of the principal organizers of California Tissue Mills in 1916. This operation was sold last spring, the name having been changed to California-Oregon Paper Mills in 1921.

During World War I he served as a major in the spruce production division of the U. S. Army. He organized the Oregon Pulp & Paper Co. at Salem, Ore., in 1919, and maintained participation in the organization's activities until his death, at which time he was chairman of the board, president, and general manager. Early in the 1920's he bought the Port Mellon, B. C., mill, which operation he sold to Sorg Paper Co. of Middletown, O., in 1941.

The Columbia River Paper Mills was organized by Mr. Leadbetter in 1923 and the mill was built at Vancouver, Wash., where he was operating two sawmills. He continued as president until his death. Leadbetter bought the Tumwater Paper Co. near Olympia, Wash., in 1928, when it had been in operation less than two years. In 1938 the machinery was removed to the Columbia River Paper Mills, and the Tumwater plant became a brewery. In 1941 he bought the Charles K. Spaulding sawmill, sash and door plant, and retail yard. Later, in 1945, he took over Charles K. Spaulding Logging Co., which has since been known as Leadbetter Logging and Lumber Co. Silver Falls Timber Co., Silverton, Ore., was also acquired in 1945.

Mr. Leadbetter was born in Clinton, Ia., Sept. 15, 1868. He is survived by his widow, Caroline Pittock Leadbetter; a son, H. L. Pittock Leadbetter; three daughters, Mrs. A. M. Cronin, Jr., Mrs Nils Teren, and Mrs. Georgian Andreae of Lisbon, Portugal; and 11 grandchildren.

Northeast Floods Hit Mills; Rising Co. Repairs Damage

Northeast floods in late December and early January were the worst experienced in many years in that section, but paper mills were for the most part not too seriously hampered.

One of the worst hit sections was Berkshire county in Massachusetts and the experience of the Rising Paper Co. at Housatonic was typical. Said Fred E. May, president: "Our principal damage was in the power department where the flood washed out the head race wall leading from the dam to the waterwheels. The foundation of the coal trestle was undermined, dropping one car filled with coal into the river. In addition to this, the entire reserve coal pile of 2,000 tons was washed away. None of the paper in stock was damaged, but the outside high voltage power line was put out of commission."

But by the second week in January the Rising mill, like most others, had repaired most of the damage and was in operation with inventory in good supply and shipments resumed.

PROFITS CREATE A NEW MILL

Background of a Dynamic Industry

H. R. MacMillan (*right*), one of the leading figures in forest industries of western Canada, who will soon become identified prominently with the pulp and paper field, has come out with a vigorous defense of profits as the lifeblood and compelling force of healty business and industry.

Mr. MacMillan was born in Newmarket, Ont., and studied forestry at Yale. He was with the Dominion forest service and was called upon in 1912 to organize the forest department for British Columbia as chief forester.

Then in 1915, he was appointed special lumber trade commissioner for Canada. On completion of a world tour in the interests of surveying possible export markets, he joined the old Victoria Lumber Manufacturing Co. at Chemainus, B. C. Then he formed his own H. R. MacMillan Export Co., with head office in Vancouver.

The company at first functioned as a marketing and shipping organization, but gradually Mr. MacMillan got into production and bought sawmills and plywood plants. Today his company directly employs more than 500 persons, operates six logging companies, four sawmills, two plywood mills, a door plant and a world-wide marketing system. His company's lumber production last year accounted for nearly 15% of the lumber production of the B. C. coast districts.

During World War II MacMillan was president of Wartime Shipbuilding, Ltd., in charge of all Canada's mechant shipbuilding operations, and he was also timber controller for some time.

His views will be of great interest to this industry because, as the builder of a new kraft pulp mill at Nanaimo, B. C.—the Nanaimo Sulphate Pulp Co., Ltd.—his organization will be very soon a participating member of this industry and particularly of the Canadian Pulp and Paper Association. The profit system, he says, made possible this mill and the jobs it will create.

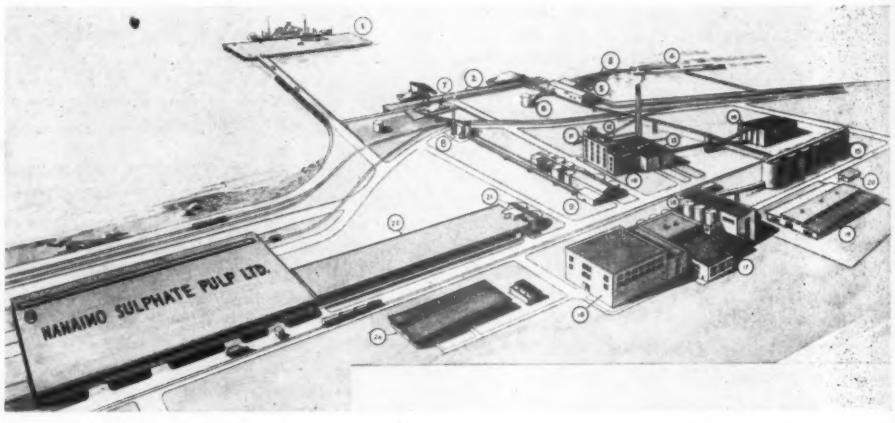
He is president of H. R. MacMillan Export Co., whose annual report shows for the year ended last Sept. 30, a profit, after depletion and tax, of $8,484,839.

"Profits are frequently condemned by a vociferous group," points out Mr. MacMillan in this report, "but such persons must be unaware of or overlook the fact that all the great primary employment—creating accomplishments, such as logging operations, saw, plywood, shingle, pulp and paper mills, etc., would not be here were it not that persons and companies have devoted managerial ability to the venturesome investment of savings.

"If such enterprising persons in past years had not risked their capital in turning raw resources to marketable form, at a profit, the present great array of secondary industries, transportation systems, power companies, farms, manufacturers of equipment and supplies for mill, mine and household and also the enormous government services would neither have arisen here or survived. There would also be no merchants."

"This company has used its profits to build up six logging operations, four sawmills, two plywood mills, door plant and a world-wide marketing system directly employing in all more than 5,000 persons. These activities expend many millions annually in supplies and services, which are an important contribution to the commerce and industry of this province. In addition, 419 persons are directly employed in British Columbia in engineering and construction of the pulp mill.

"The pulp mill now building represents the next step in the most creative and unselfish use of profits. It is only one step in a policy of the full use of otherwise idle forest resources. Should the Socialist point of view prevail there cannot be any more such steps by this or any other of the hundreds of companies in this province, which by use of their imagination, experience, energy and capital are impelled by hope of profit to venture into the creation of wealth for the community from natural resources still lying fallow and unproductive either of wages, taxes or profits."



Key to Artist's Sketch of Nanaimo Pulp Mill (being built on Vancouver Island): 1. Deepsea wharf. 2. Scow dock. 3. Log haul. 4. Booming grounds. 5. Wood room. 6. Chip storage bin. 7. Lime rock pile. 8. and 9. Recausticizing plant. 10. Evaporator building. 11. Recovery building. 12. Precipitator building. 13. Boiler room. 14. Hog fuel storage. 15. Seven chip storage bins. 16. Bleach plant. 17. Screen room. 18. Digester building. 19. Repair shops and stores. 20. Oil and paint shop. 21. Stock blending tanks. 22. Machine room. 23. Pulp warehouse. 24. Laboratory.

EQUIPMENT FOR NEW MILL

Nanaimo Project Goes Forward

Bleached sulfate pulp will be the product of Nanaimo Sulfate Pulp Co., whose 200-ton mill is under construction by the H. R. MacMillan interests on Vancouver Island, and the estimated cost of the project is $13,000,000.

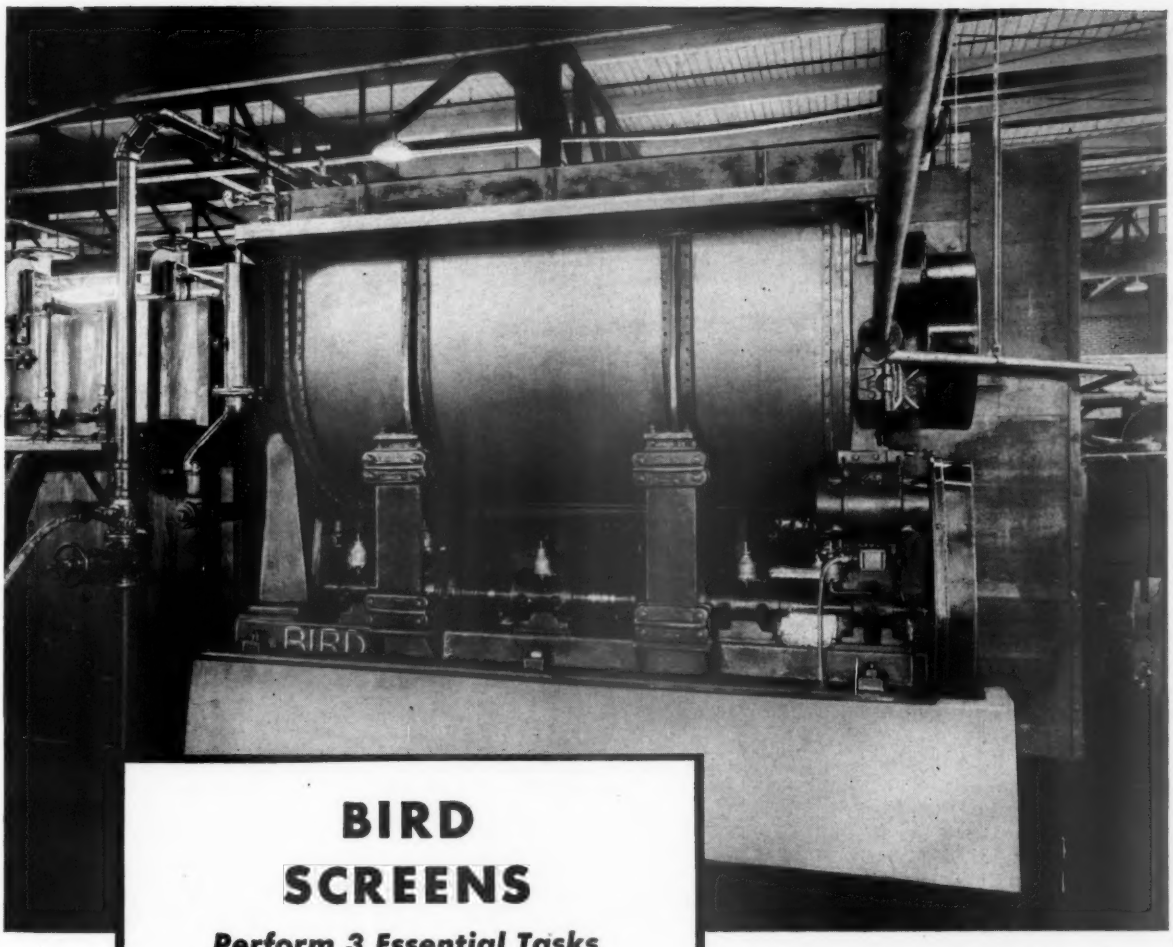
The pulp mill is being built on the waterfront of Northumberland Channel, about four miles southeast of Nanaimo, and is to be in operation by the fall of 1950. The bleaching unit will be added following completion of the initial part of the project.

President H. R. MacMillan says the company has so far committed itself to expenditure of more than $8,000,000. He said there will be jobs for 225 persons, a high proportion of whom are skilled workers who will constitute a valuable addition to British Columbia. Their families, together with those who will derive employment indirectly will add 1,000 self-supporting persons to the community.

The magnitude of varied forest operations of the parent company, H. R. MacMillan Export Co., is indicated by its sales for the year ended Sept. 30, 1948, of $80,692,162. Its mills produced 304,000,000 feet of lumber, 10.5% of the output from British Columbia's coastal forests, and about 122,000,000 sq. ft. of plywood.

The pulp mill has been designed by Howard A. Simons, of Vancouver, B. C.

It may put into effect a somewhat rev-



BIRD SCREENS

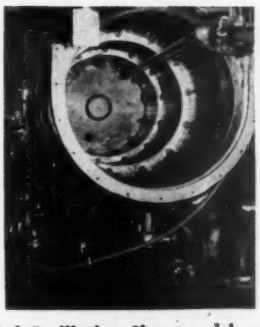
Perform 3 Essential Tasks Ahead of Your Paper Machine

1. They deliver clean stock up to the limit of paper machine capacity.

2. They comb, straighten and individualize the fibres, assuring good formation at maximum machine speed.

3. They deliver stock free of strings, lumps and slime — uniform in weight.

BIRD MACHINE COMPANY
South Walpole, Massachusetts



The Bird Oscillating Shower, driven right from the Screen itself, keeps the screen slots clean and open with extremely small volume of shower water. Many mills are putting it in existing Screens and cashing in on immediate and substantial savings and operating advantages.

90% OF ALL THE PAPER MACHINES IN NORTH AMERICA ARE EQUIPPED WITH BIRD SCREENS

olutionary principle in log barking. Experimental work on a new type of hydraulic barker is now under way at Canadian White Pine Co., a MacMillan mill on the Fraser River, and while this development is being kept "under wraps" until all the details have been worked out, it is claimed that the barker is singularly effective and surprisingly economical.

Preparing of the site was carried out by B. C. Bridge & Dredging Co., which recently completed a similar undertaking for Columbia Cellulose Co. (Celanese Corp. of America) at Port Edward, B. C.

More than 400 men are now engaged on engineering and construction.

It is reported that the heat recovery unit will be supplied by Combustion Engineering in conjunction with Vancouver Iron Works, and these companies will also supply the boilers.

Wet end of the Fourdrinier 178 inch machine will be built by John Inglis Co., according to Pusey & Jones design. Slice will also be made by Inglis, as well as three extra heavy press sections, the first one 500 pounds per square inch pressure, the second 900 p.s.i. and the third 1300 p.s.i.

Paper Machinery Ltd., will supply the Flakt dryer of 175 tons capacity initially. The black liquor Rubush -design evaporator, to be supplied by Inglis, will be a six-body sextuple effect unit.

Inglis will also supply four digesters—stainless sheet bonded to steel plate, according to patents held by the A. O. Smith Corp. of Milwaukee, and the first of their kind to be installed in Canada. Inglis and Bingham Pump Co. share pump orders.

Contract for washers have gone to Sherbrooke Machineries, Ltd., with Traylor Engineering Co. building the lime kiln. Controls will be by Foxboro. Dorr causticizing equipment is to be installed.

All mechanical drives and reduction gears for high density tanks, conveyors and chip feeders are being supplied by David Brown & Sons (Huddersfield, England), Ltd., manufacturers of Radicon gears.

At Vancouver head office, the MacMillan pulp mill organization is under direction of Vice President E. B. Ballentine, with Clifford Crispin directly in charge. Jack Prescott represents the company at the mill site.

Appleton Institute

The Institute of Paper Chemistry is a cooperative training institution sponsored by leading American paper manufacturers, training of skilled chemists and purpose of training skilled chemists and technicians beyond college level in the intricacies of papermaking chemistry. It is operated in connection with Lawrence College in Appleton. Field trips afford these students the chance to establish actual contact with the type of work for which they are preparing.

Eleven states and one foreign government are represented by the members of the entering class at the Institute this year.

THIS MAP SHOWS SITE CHOSEN on Vancouver Island for new 200-ton bleached kraft pulp mill being built by the H. R. MacMillan Export Co., one of the West's most important timber operators. Foundations have been started for the new mill, which will cost about $13,000,000. Locations of seven other mills are shown.

NEW PRICES—THEIR SIGNIFICANCE

The month of January saw the market corrections and adjustments to more normal relationships between prices of various pulp grades that the industry had long expected. The two parallel trends were "status quo" and "slightly downward," and none of the industry leaders interviewed by **PULP & PAPER** saw cause for alarm.

Among the changes: Puget Sound Pulp & Timber, Bellingham, announced a reduction of about $10 per ton on unbleached sulfite, bringing the price to $118 delivered to any point in the U. S. Spaulding Pulp & Paper Co. also announced reduction in unbleached, but U. S. bleached remained as in the fourth quarter of 1948.

Some U. S. quarters appeared to expect slightly downward changes in Canadian prices but at time of going to press there was no concrete evidence of this. Brown Company announced a change in bleached kraft, however, from $160 delivered to $147.50 f.o.b. LaTuque with a $12.50 maximum freight allowance. Canadian bleached and unbleached sulfite are now separated by about $10 per ton.

Swedish mills announced no change, the $185 dock price on bleached remaining as is. But Norway mills have come down to $140 dock for bleached. However, Norwegian tonnage does not loom large in the total picture.

Only upward trend was announced by Powell River of an increase in newsprint of three dollars, bringing it to $103 per ton—but this was merely an adjustment in delivered price to bring Powell River's newsprint into adjustment with the normal delivered price in far western markets and indicated no upward trend in newsprint, according to best observers.

Adjustments between grades of papers were also visible during the month of January, and for the same reason as evidenced in the pulp industry. War and postwar periods had brought unreal differences between types and grades. The opinion of the best informed was that the new prices and the status quo—the latter had become a phenomenon—meant nothing more than corrections of distortions that had been a long time in coming and a long time expected and even hoped for.

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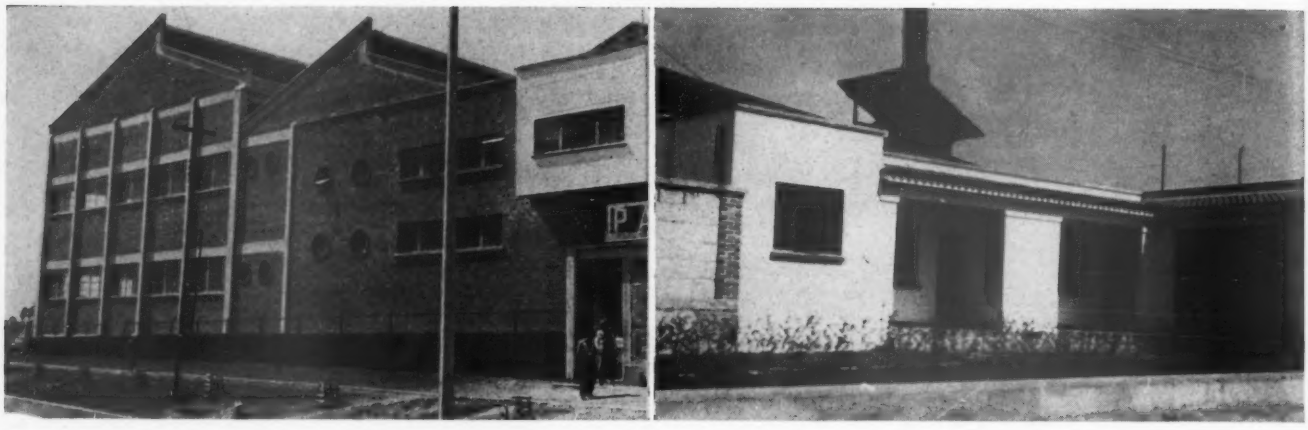
MEXICO'S NEWEST PAPER MILL

Built by Macorra in New Industrial City



AT LEFT IS VIEW OF MILLS built at new industrial city of Tlalnepantla, 8 miles northwest of Mexico City, by Don Jose de la Macorra II. Separated only by wall, carton mill at left has not yet started up, awaiting necessary parts. But mill on left, "PANASA"—Papelera Nacional, S. A., has begun trial runs on two small fine paper or cigaret paper machines. This view is from south side. Note interesting roof construction. These pictures taken by PULP & PAPER editor.

At Tlalnepantla, the new industrial city just eight miles northwest of Mexico City, trial runs have been made in the new modern 14-ton two-machine fine paper mill of Papelera Nacional, S. A., recently visited by **PULP & PAPER**. The two small machines rebuilt and installed in an entirely up-to-date plant were intended for either or both white paper or cigaret paper manufacture according to the process of Peter J. Schweitzer, Inc., operators of mills in eastern U. S. A flax cellulose plant to serve the machines has been built at the site.

Don Jose de la Macorra II, widely known internationally as general manager of the San Rafael company mills in San Rafael and Progreso, Mexico, is also the head of this separately organized company. In fact, two new mills have been built at Tlalnepantla, with only a wall between them, but they are organized as separate companies. The other is Cartonera Nacional, S. A., also headed by Sr. Macorra. Its 300 ft. long board machine has been installed but other necessary parts were still awaited.

Hardly anywhere on this continent would you find a more smartly engineered layout than the new Papelera Nacional and Cartonera Nacional which stand side by side on a slightly sloping hill at Tlalnepantla.

Spanish-born Senor Macorra is also the president of a company building the new city at Tlalnepantla, which will house some 40,000 persons, including employes for a Westinghouse plant, a glass plant, a fertilizer plant, a pottery, a tool industry, a galvanized wire plant and plants for other iron and steel products, as well as the two paper mills.

Tlalnepantla's population has already doubled to about 15,000 and before "Cusa" —the company which is building the new city of homes, schools, sports fields, movies, churches, etc., is finished there will be an investment of about $60,000,000 just in the community alone—not counting the industries.

Tlalnepantla used to be a farming community only, marketing butter, milk and cheese especially. Most of the industries being built there will employ 1,000 or more persons.

Besides building this community and heading up the big San Rafael company, Senor Macorra has found time to engineer the two paper mills in Tlalnepantla. As he did at San Rafael, here again he has taken advantage of the slight hillside slope to lay out the two mills with a gravity flow system from pulp production through to the finished products. They will be stream-lined but also highly flexible operations.

San Leandro Plant Move Is Almost Completed

Mutual Life Insurance Co. has purchased the new office and factory buildings of the Western Waxed Paper Co., division of Crown Zellerbach, at San Leandro, Calif., leased them to Crown Z for a long term with renewal option.

Western Waxed Paper's move from Emeryville to San Leandro, where 200 will be employed, will be completed about mid-February.

Australian Newsprint

Australian newsprint is being manufactured at $16 less per ton than the Australian price of newsprint imported from Canada, according to Sir Keith Murdoch, chairman of Australian Newsprint Mills, Ltd. His company's Tasmanian mill produced 31,300 tons of newsprint during 1948 and is increasing production by 50,000 tons a year.

TOWN VOTES TO GIVE SITE

For New I. P. Southern Mill

Of the 3008 registered voters in Natchez, Miss., 80% cast a favorable ballot at the polls on Jan. 11 on a proposal that a public bond issue of $300,000 be sold to provide funds with which a 1000-acre site will be bought and given to International Paper Co. for a site for a new $20,000,000 hardwood dissolving pulp mill. The vote case was 2408 votes for and only 68 against the measure.

The plant site will lie on both sides of St. Catherine Creek, on high ground several hundred yards from the river's edge. The bond proposal also covers a right-of-way for a railroad spur line to reach the property.

Under the "Balance Agriculture With Industry" act, the International Paper Co.'s new mill is not eligible for tax exemption, as has been the case in some new mills, because the company already operates within Mississippi; a mill at Moss Point. However, there's no question about the welcome it will receive.

Construction of the plant will require 18 months.

MACHINE MIGRATION

CHAMPION MOVES FOUR SOUTH

While much has been said about the tremendous post-war expansion in the South of this industry it has remained for the Champion Paper and Fibre Co. to give this trend a most significant emphasis in the actual transfer of manufacturing equipment from North to South.

From Hamilton, Ohio, four papermaking machines are to be moved to Texas by Champion. The first of these units started operation at the company's Pasadena, Texas, mill in Nov., 1947. The other three are to be moved successively in 1949, 1950 and 1951. (This will reduce the number of machines in Hamilton, oldest and home office mill of the Champion group, from 10 machines to six—all of them Fourdriniers).

Accommodations have been provided for these transferred machines in an improvement program initiated in 1946 and still in process of development. However, the bulk of the work on the buildings has been completed.

The expansion of this plant in a little over a decade to become one of the major industries of the Houston, Texas, area, has resulted from favorable geography in relation to pulpwood supply, natural gas for fuel, water supply and water transportation, and last but not least, favorable relations with employes and with the community. Passage of time has strengthened the welcome originally extended to the industry in Texas.

Champion's Pasadena pulp mill was built in 1937; paper mill was added in 1940. One machine which serves Life magazine, now produces at the rate of 120 tons a day. Capacity of all machines is 450 tons of pulp and 230 tons of paper. Its 900 employes handle 900 cords of wood per day. Houston industries absorb the mill by-products—caustic soda, tall oil, turpentine and hydrogen.

W. R. CRUTE, Manager of Pasadena, Texas, Mill (Houston Division) of Champion Paper & Fibre Co.

Pulp and paper products can be shipped by barge or rail to Hamilton, O., and Chicago. The Hamilton mill now relies largely on Pasadena for pulp.

Prior to the removal of the first machine from Hamilton, the Pasadena equipment included one 216-inch wire Beloit Fourdrinier and a 168-inch wire Black-Clawson pulp machine.

Dismantling of a 115-inch trim Black-Clawson board machine erected in Hamilton in 1902, began on July 13, 1937. In re-erection at Pasadena its dryers were balanced and new bearings provided for all dryer bearings. It required 48 freight cars to move the machine weighing 1,100 tons.

It now produces 115 tons per 24 hours of 320 lb. milk bottle end stock, or 92 tons per 24 hours of 280 lb. milk bottle body stock. The machine is equipped with a Langston rewinder cutting six 17½-inch rolls of 750 lbs. each.

With the machine came seven long time top operations men to Texas from Hamilton.

Currently of the mill's 400 tons of pulp, 150 tons are converted to finished magazine and food container stock, and the 250-ton balance is shipped to the company's other mill, as well as mills not affiliated with Champion, for conversion into book paper.

Of the three additional machines scheduled for transfer to Pasadena, one will be a machine coating unit making magazine paper; one for making offset, bonds and coffee bag papers; the third for manufacturing offset papers and uncoated groundwood book papers. The mill's groundwood production is not included in the total production already quoted.

To accommodate these four machines involved in removal from Hamilton, the company erected an addition to its structure measuring 786 feet long, 184 feet wide, 3½ stories high and with 361,800 square feet of floor space. This structure also provides space for finishing and shipping.

The mill site contains 162 acres, and to accommodate the increased activity and greater railroad switch track capacity the company purchased a General Electric diesel-electric locomotive.

New Groundwood Mill

A next major unit was a groundwood mill (there had been none) complete with pulpwood yard, Jeffrey pulpwood conveyors to a new Manitowoc Engineering Co. 12 x 45 foot barking drum, thence to the mill proper. A conveyor takes the barked pulpwood to a high elevation from which it feeds down onto a sorting conveyor alongside the groundwood mill. At a mid-point, an experienced employe selects "knot-free" pieces, and diverts them through a hopper to a conveyor from which the logs are plowed into bins and from which two Roberts grinders are fed.

While the conventional length of wood for grinding is four feet, the standard length of pulpwood cutting for Champion's Texas pulp mill is five feet. Rather than become involved in the problem of cutting two lengths for the mill, the company asked the Appleton Machine Co. to build two units to take the longer wood. These are the first five-foot grinders ever built. One is equipped with Carborundum Co. artificial stones; the other with artificial stones from Norton Co. The stones are of 62-inch diameter and 66-inch base. Each grinder is driven by a 3000-HP Westinghouse powered electronically con-

Champion Families Were Given Chance to See Texas At Company Expense Before Deciding to Move—or Stay North

In connection with the transfer of Champion equipment to Pasadena, Texas, Champion employes at both the Hamilton, O., and Canton, N. C., Mills were screened as to their willingness to move to the Texas site. Seniority then entered the matter of selection. Before the chosen families were asked to commit themselves about moving to Texas the employe and his wife were given the opportunity, at company expense, to go down to Pasadena and look over the community and the housing situations first hand, and then return to make their decisions.

So far there have been 30 employes from both Hamilton and Canton make the move to Texas, all under this plan of first having the chance to see what the countryside looked like. The first group of 12 families to make the move included employes engaged directly to operate the first machine moved South.

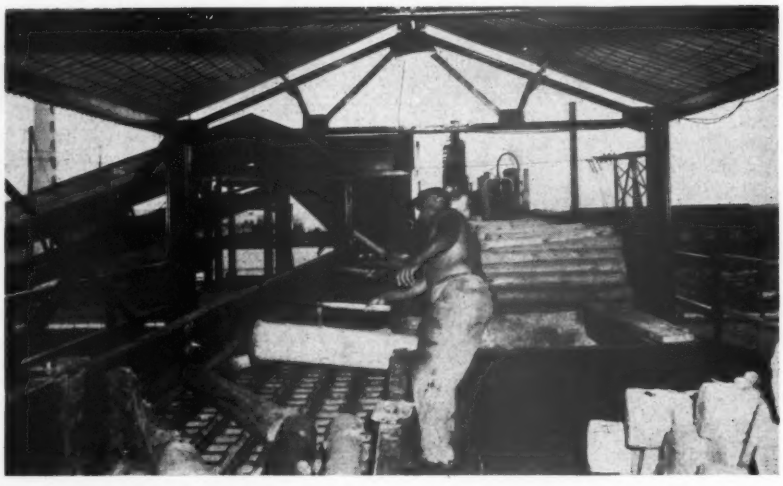
Any employe not selected or not choosing to make the move was given a chance at other jobs in the Champion plants at Canton or Hamilton, as the case may be. Pay rates were maintained for employes choosing to remain behind at other jobs.

This method of selecting employes to move South, and permitting those who choose to do so, to remain behind, will go on with the moving of each machine, and is designed to give the employe free choice in his decision, and at the same time not disrupt employment for that field.

This loss the cities of Hamilton and Canton incur in payroll families will be offset by expansion and stepped-up operation of one of Champion's specially produced papers known as "kromekote." This is a special paper that is coated on one side only. It is receiving fine acceptance in the paper field, and a number of men will be needed in this department. Champion officials cannot tell at this time to what extent the employment balance will be maintained, but they feel certain that the loss to the community will be held to a minimum.

CHAMPION IN EXPANSION--AGAIN SELECTS JEFFREY

Yes, no expansion without Jeffrey representation. Pulpwood, bark and chip Conveyors (chain and belt types) to keep production rolling at Champion — to keep maintenance costs down—PROFITS UP. Having served the handling equipment needs of pulp and paper mills for over a half century, Jeffrey assures sound engineering, attention to provisions for future plant expansion, and rugged equipment. Call in a Jeffrey engineer—he'll save you time, money and worry.



Above—An important part of the job in fine paper making. Selecting just the right sort of pulpwood (knot-free). This Jeffrey chain Conveyor is built to take the severe punishment of falling wood.

●

Left—Another Jeffrey chain Conveyor carrying selected pulpwood from the service hopper. The wood is plowed or diverted into bins from which the grinders are fed.

Right—Showing the Jeffrey Belt Conveyor for carrying bark to boilers; a Jeffrey chain Conveyor (right of runway) is used for conveying unsorted wood to pulp mills.

• • •

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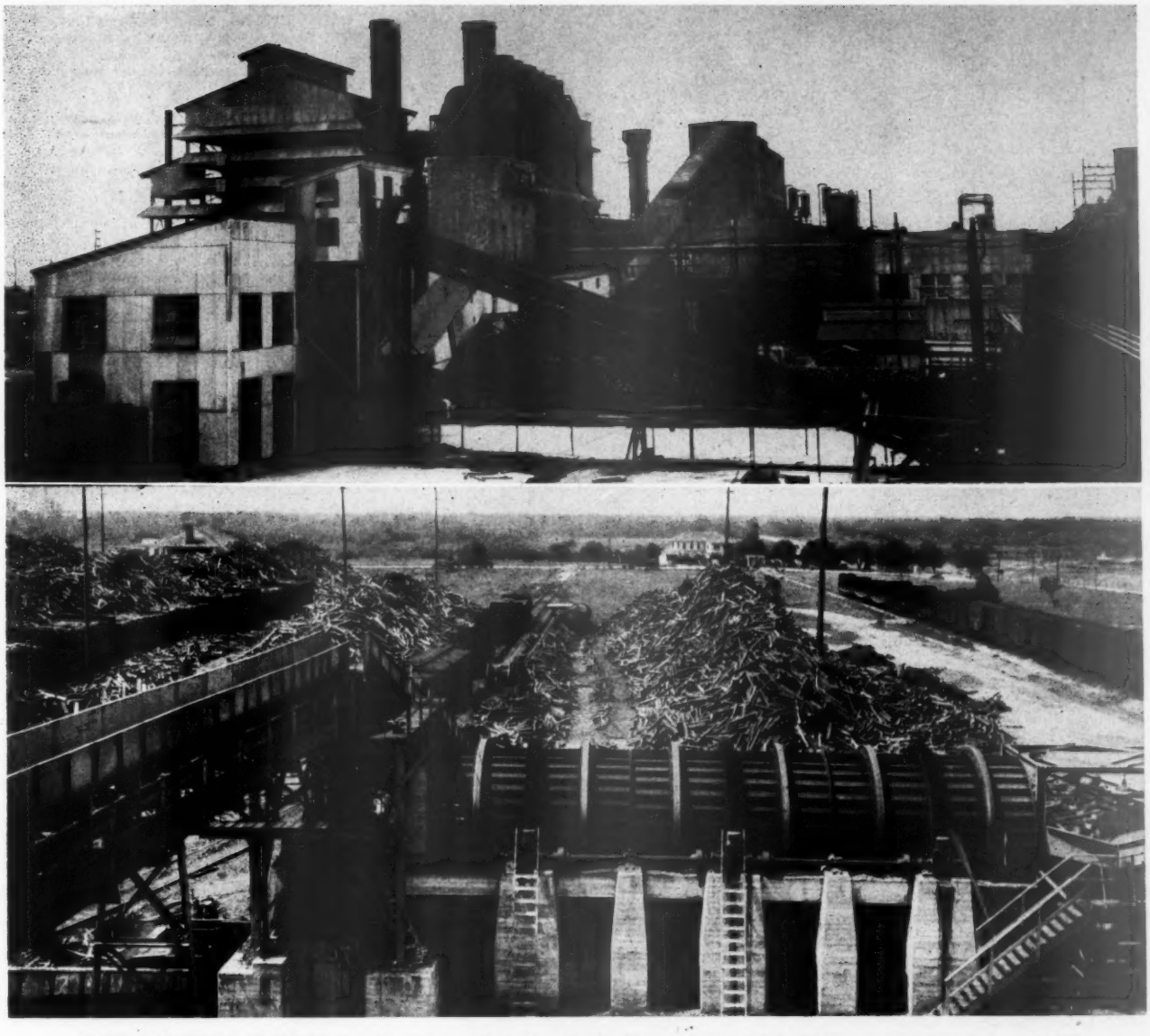


OUTDOOR SCENES AT CHAMPION—Top, looming to left above pulp mill chipper house is 112 ft. high apron-type structure for new 250 ton Babcock & Wilcox, 125,000 lb. recovery boiler. New smelter boiler is equipped with Cottrell precipitator.

Lower, New Manitowoc Engineering Co. barker is served by direct conveyor and pulpwood passes from it to groundwood mill. This is entirely new installation; pulp mill being served by two older barking units.

trolled drive. Initial operation at half-capacity yielded 30 to 40 tons per day for the groundwood mill. The Pasadena mill is the first in that section to produce fine book paper from ground pine wood.

Instrumentation of the groundwood mill is by The Bristol Co. of Waterbury, Conn. The grinders are outfitted with Jonsson bull screens. Other necessary equipment includes a Trimbey regulator, three Montague Machine Co. rotary fine screens, and two Improved Paper Machine Co. deckers.

The groundwood mill is connected with the pulp mill by an elevated Jeffrey conveyor. Part of this installation carries a 24-inch wide 600 foot long Goodyear Rubber Co. belt that takes the bark from the Manitowoc barker to the boiler house. The other section, separated by a safe walkway, carries pulpwood unselected for grinding to the pulp mill's chipper house for kraft pulp. A conveyor arrangement provides for return to the barker of those pieces inadequately cleaned in their first passage.

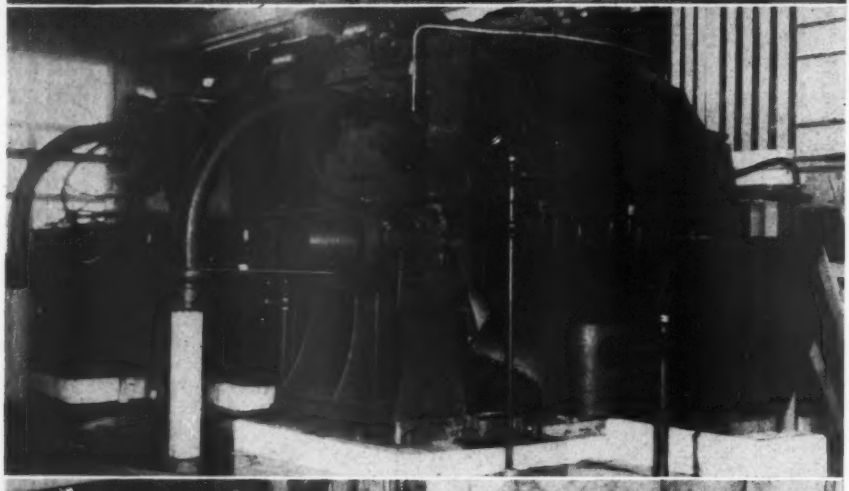
Pulp Preparation and Bleaching

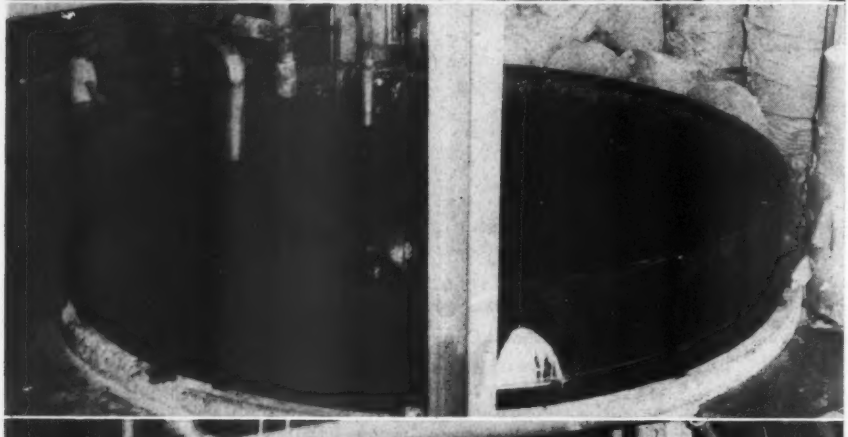
For the refining service to the machine already moved from Hamilton there have been installed four E. D. Jones & Sons Majestic jordans driven by General Electric motors and one Dilts Machine Works Hydrapulper. To serve this machine and others to follow there has been installed one 20-foot diameter batch Shartle Hydrapulper with provision for a duplicate to follow. This giant-sized unit is driven by a 100-HP General Electric motor.

An expansion of the Improved Paper Machinery Co. (Thorne Process) bleach plant was effected at a cost of $650,000. The program here included five additional tanks and four new filters. In the operation of the bleach plant the Champion mill emphasizes "control" with four crews of four men each maintaining around the clock operation; and chemists running continuous tests of the pulp.

Enlargement of the water treating plant, costing $250,000 has provided a new cooling tower of 20 million gallons daily capacity, a new 42-inch line to the turbine room to serve an additional turbine, a new pump house in which two 16,000 G.P.M. Ingersoll-Rand centrifugal pumps with Chapman valves are driven each by a 500-HP General Electric motor. The filtration plant has a Dorrco mixer. Its capacity has been increased by 50%.

The mill uses 10 million gallons of water per day from municipal sources plus 10 to 20 million gallons from its own supply. The company has asked the municipal authorities for an allocation of an addi-





EQUIPMENT INSTALLED AT TEXAS MILL—

1. **One 115-trim board machine already moved from Hamilton, Ohio, shows in background; bed for another machine is in foreground. Besides these, two more machines will be moved into 3½-story building.**
2. **Two Roberts Grinders were especially designed and built by Appleton Machine Co. They take standard 5-ft. pulpwood lengths; are equipped with Westinghouse electronic drives.**
3. **Top view of giant, 20-ft. Shartle Bros. batch Hydrapulper.**
4. **Bottom view of Shartle Hydrapulper from floor below view 3. Hydrapulper is driven by 300 HP General Electric motor. Space has been provided for duplicate of this installation.**

tional 10 million gallons daily as part of the service for the three machines to come.

Recovery and Power

With the upward revision of the paper production factors, the provision of more steam and electric power was inescapable. To meet the needs of the revamped mill, the company has accomplished the following:

Converted the older No. 1 and No. 2 Combustion Engineering recovery boilers to burn either bark or natural gas, each providing 75M lbs. steam at 380 lbs. drum pressure.

Converted No. 3 Combustion Engineering recovery boiler to burn either liquor or natural gas, this unit having a capacity of 50 tons, or 26M lbs. of steam.

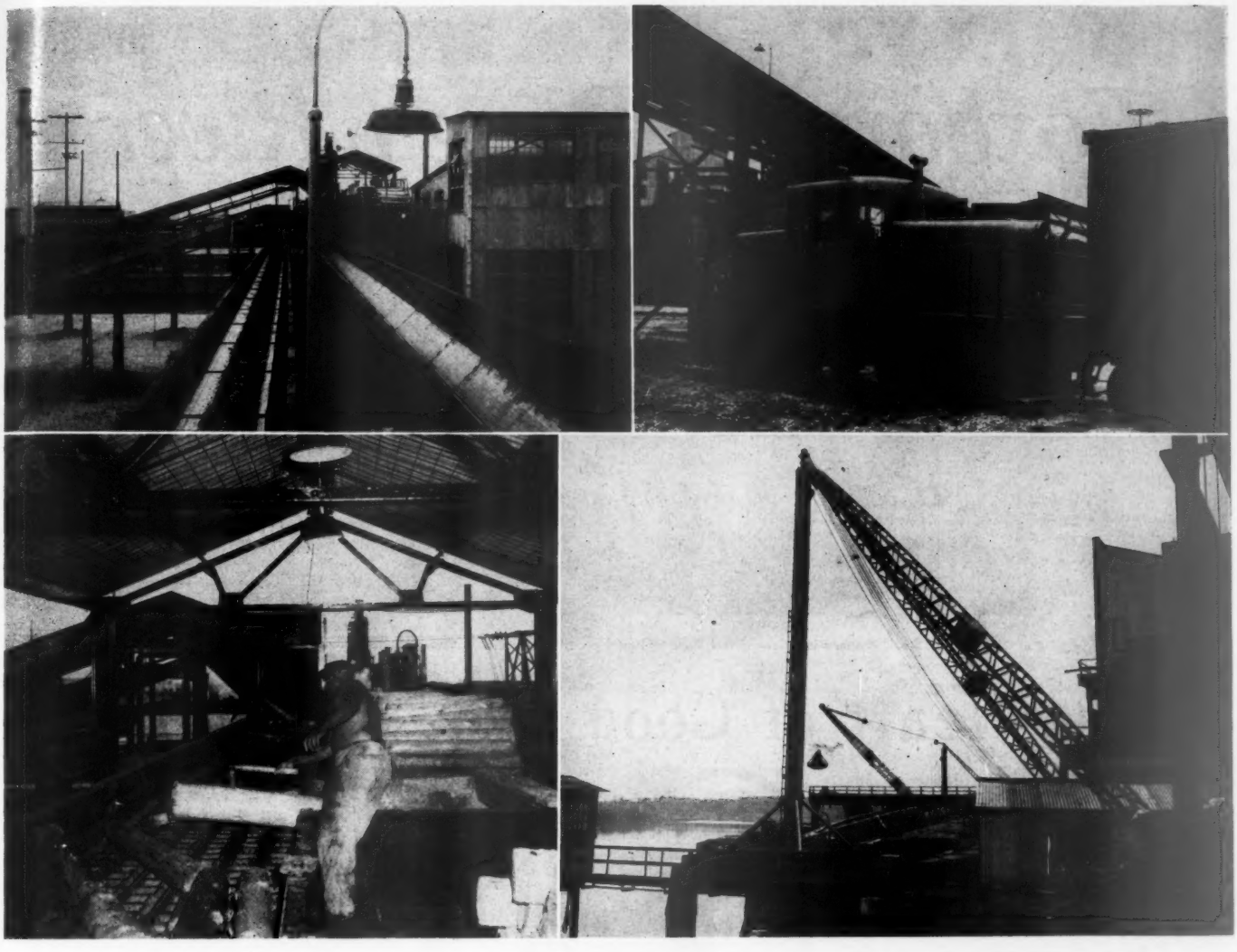
Overhauled No. 4 Combustion Engineering recovery boiler.

Installed a new Babcock & Wilcox recovery boiler of 250-ton 125M lbs. capacity in a new 112-foot high structure, equipped with a new $293,550 Cottrell precipitator. The company has been spending $450,000 to "clean up" its exhaust fume situation. The Pasadena mill has the first Cottrell precipitator installed in the South and in revamping of the boiler installations, this unit will take care of boilers No. 1 to No. 4, and the new unit has its own modern installation. In effect, the load has been shifted from the older to the new recovery system.

The power capacity is further amplified by installation of four new Babcock & Wilcox marine type water tube boilers operating as a bank and producing 200M lbs. of steam. Also newly installed is a 150-ton 65M lb. steam capacity Babcock & Wilcox boiler. The mill still retains an old barker-burning boiler producing 65M lbs. of steam.

When the Pasadena mill was originally built it started out with a power contract with Houston Power and Light Co. This amicable arrangement is still expressed in a power agreement under which the plant has available 165M lbs. of steam capacity that can be furnished through a 14-inch steam line from the power company's plant a mile away.

However, in its plans for an enlarged paper mill, the company provided for a new General Electric 12,000 KVA, 2300 volt turbo-generator having 310 lbs. pressure, 650 degree temperature (F), 40 lbs. extraction. This unit doubled electrical energy production in the mill's power



SCENES AT CHAMPION MILL—

Upper left—Groundwood mill at right, in left foreground, 24-in. wide, 600-ft. long Goodyear Rubber bark belt. On right of walkway is conveyor carrying unselected pulpwood to chippers; in background, higher conveyor brings pulpwood from barker. Conveyor system was furnished by Jeffrey Mfg. Co.

Upper right—New General Electric diesel-electric locomotive, used to spot cars of pulpwood, chemicals and finished paper which are constantly on the go at Champion.

Lower left—Jeffrey conveyor passes pulpwood past sorter who skillfully plucks knot-free pieces into open chute connected with grinders.

Lower right—Stiff-legged derrick swings ton and a quarter paper rolls fo Life magazine from upper level loading platforms into barges on Houston ship canal. Last year 26,758 tons of paper moved out by barge.

plant. It started in operation Aug. 1; 1948, with the latest in G.E. cubicle control with switch gear. A third turbine will be installed later.

The new turbine is designed for an 80% power factor.

With the increased responsibility for maintaining the enlarged operations of the mill, the capacity of the maintenance department's machine shop was increased by a 40 x 64 foot addition. The additions to machine shop equipment will include one 184-inch and one 110-inch Bridgeport knife grinder; a No. 4 Universal Milling machine; a boring mill of 64 to 72 inch size; and more space for the electrical and meter shops, and tool room.

Champion's 162-acre mill site is on the Houston Ship Channel, which in turn connects with all Texas rivers via the Intracoastal Canal, and by the same waterway with the Mississippi river and its tributaries. As a result the company has enjoyed the savings accruing from heavy, slow moving, bulk shipment. In 1947 the mill shipped 26,758 tons of finished paper by water; received 68,655 tons of pulpwood, salt, oyster shells, and caustic. Its total incoming and outgoing freight bills, rail and water, amounted to $3,000,000.

Much loading and unloading is performed at the mill's docks at ship channel water edge. The enlargement of the mill has brought the structure down close to the landing, and as a result landings were provided on the second and third floors from which a newly installed stiff-legged derrick could swing 10¼ ton rolls of paper directly into barges. This obviated the use of elevators to bring the shipments to the ground floor and resulted in substantial savings. Where formerly it required five days to load out an average barge load of 1,110 rolls of paper the job now can be done in three days.

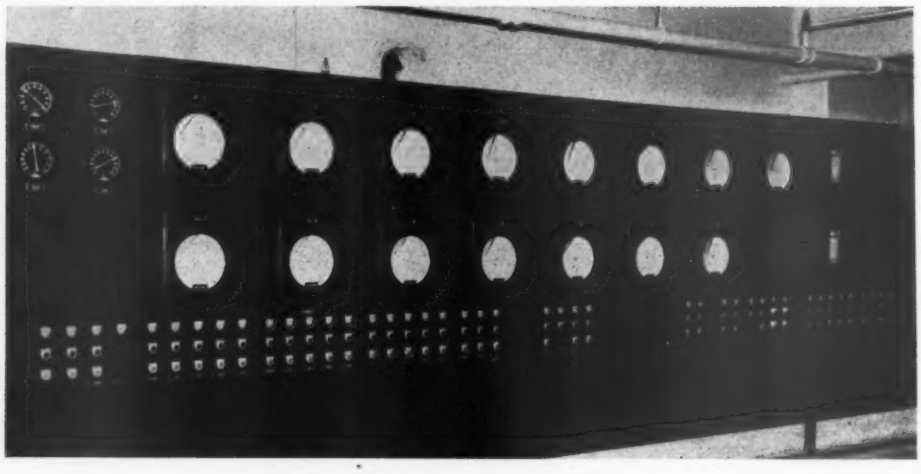
For unloading pulpwood from cars the mill operates two Northwest cranes equipped with orange peel buckets and one steam crane.

The Pasadena mill's payroll embraces around 900 persons and amounted to more than $3,600,000 in 1947. The hourly employes are represented by an independent union. The company provides group health and accident insurance, group life insurance, a group retirement annuity plan, a hospital association, a savings and loan association, and many popular recreational features. The plant management group numbers 54, all of whom rose from the ranks.

In 1947 the mill purchased over $350,000 in such supplies as felts, wires, etc., and

(Continued on page 86)

Foxboro at Powell River



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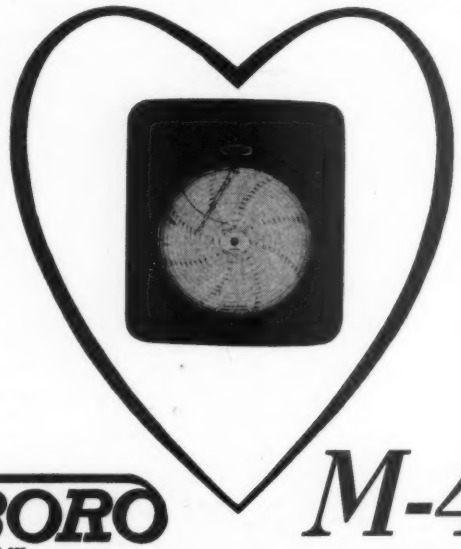

The Model 40 Pneumatic Controller is available for the control of temperature, pressure, flow, liquid level, humidity, density, etc., in a full range of control actions and combinations and can be supplied as either an indicating or recording controller, the latter in single or multiple pen designs. Send for Foxboro Bulletin 381.

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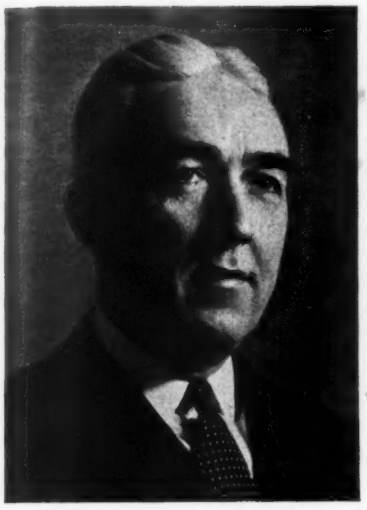
POWELL RIVER'S NO. 8



HAROLD S. FOLEY (left), President of Powell River Co., threw switch that set new machine in motion. Under his direction, company carried out one of industry's largest expansions on West Coast. RUSSELL M. COOPER (right), Resident Manager at Powell River, B. C. A high speed man, formerly at Baie Comeau, Que.

A significant advance in manufacture of newsprint was signalized when President Harold S. Foley of Powell River Co. threw the switch that set in motion his company's sleek, new No. 8 machine which embodies latest developments in that high speed field in design, instrumentation and operating efficiency.

No. 8, which in a sense represents the goal of several years of planning, development and construction in the busy British Columbia paper town of Powell River, is not merely one of the two newest and fastest newsprint machines in the world (a similar machine at Bowater's Newfoundland Pulp & Paper Mills went into production later this past fall at Corner Brook, Nfd.).

Powell River's was the first new machine to be completed in Canada in more than a decade, and it incorporates many unusual and to some extent revolutionary features such as are likely to be animatedly discussed for some time.

No. 8 is housed in the same building where No. 7 was installed in 1930. Its wire is the same width, 226 inches, as the 1930 machine, but it is designed for a potentially possible speed of 2000 ft. per minute, or 600 f.p.m. faster than the older companion machine.

The machine had started up at 1200 f.p.m., the fastest startup for any news machine in history up to that time, and gradually was worked up to a speed of 1550 f.p.m.. Both new machines are expected to exceed the record average speed of 1650 f.p.m. held by the Baie Comeau Que., Mill, and even the peak speeds at Baie Comeau of 1730 f.p.m.

However, Powell River No. 8 has been averaging 1475 f.p.m., while some preliminary kinks are being ironed out.

The new Powell River machine is notable for such departures from the conventional as a totally inclosed stock inlet: a pressure-controlled gravity-accelerated combination flowbox and slice, conceived and worked out by the Powell River Co. While many of the automatic controls related to the machine have been fully tested before at other mills, this is the first time that they have been incorporated into one integrated unit, and provision has been made for further flexibility in the application of additional controls when and if required.

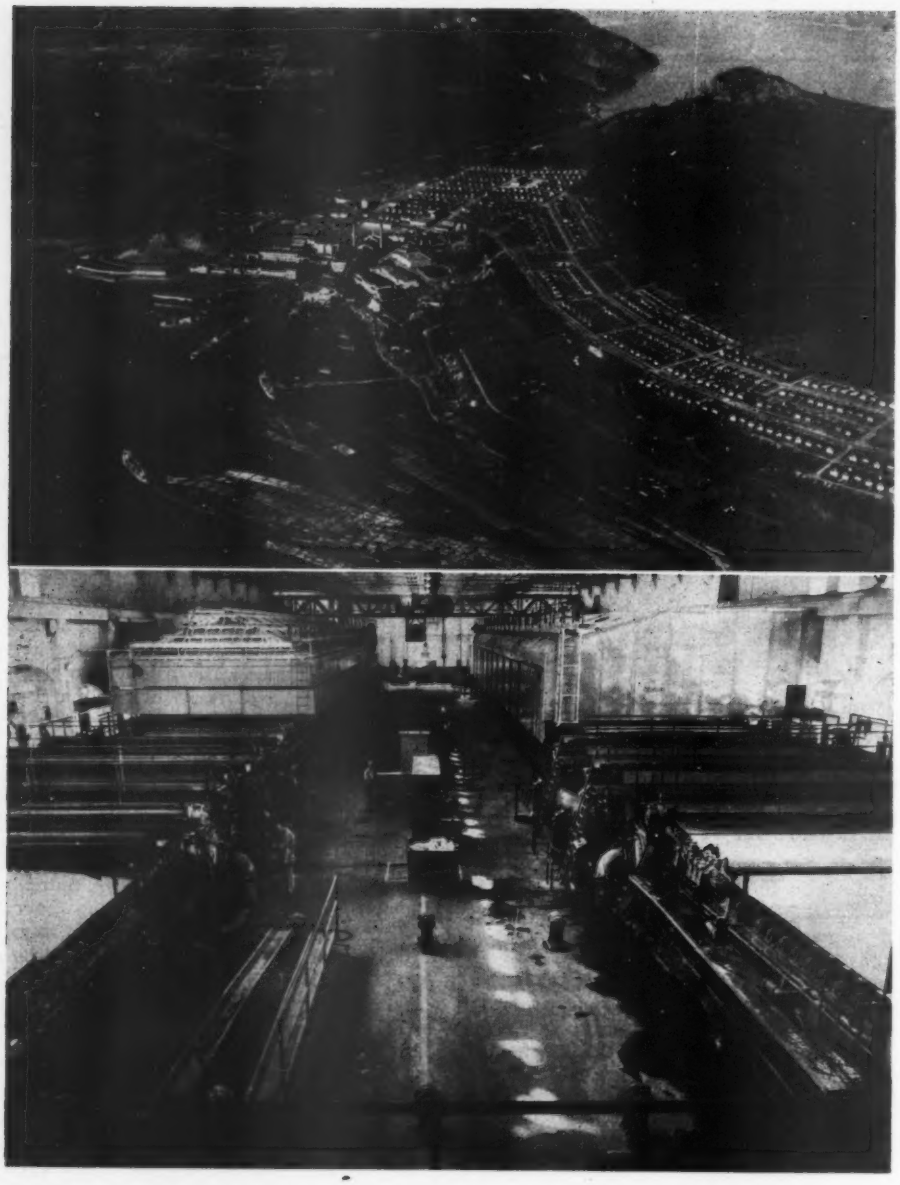
The new machine produced initially about 175 tons daily and should average 200 tons at 1500 f.p.m. It will not only allow retirement of older machines at Powell River but will bring the company's total annual newsprint output to approximately 265,000 tons.

Part of a Big Program

The story of No. 8 really goes back a good many years because when No. 7 was completed the company's plans already contemplated early building of a twin unit, but several factors intervened to delay plans, one of them being World War II. But even before the war ended, Powell River Co. had inaugurated a sweeping modernization and construction program involving the outlay of more than $10,000,000 and it is still continuing. Most of the early work was related to the wood preparation plant, where a hydraulic barker and chipper were installed, to give the mill a greater diversity of raw materials; and to the hydro-electric and steam power plants. The building of No. 8 represented the second major phase of the postwar program.

When Powell River Co. began to lay its plans for increasing newsprint production the management realized that the amount of available power was limited, the total resources at Powell and Lois drainage areas being sufficient for only 50,000 kilowatt of continuous electric power, which could be augmented by some 15,000 kilowatt of thermo power produced in back pressure turbines installed ahead of the paper machines. Any greater volume of power would have to be produced by condensing turbines whose cost was considered prohibitive. Combined hydro and thermo power potential of the Powell River plant, with due allowance for the normal increase in load over a period of

AT POWELL RIVER—Project Engineer Sven Quist explains instrumentation of new No. 8 machine to Executive Vice-President M. J. (Joe) Foley; Engineer Sherry D. Ford listens in.



POWELL RIVER INSIDE AND OUT—Top: Air view of British Columbia's hustling pulp and paper town which produces more newsprint than any other community on Pacific Coast. New townsite developments are shown at right.

Lower: Two giants, No. 7 (left) and No. 8 (right), housed in same building. Tricky and formidable job of installing new No. 8 was carried out by B. C. Bridge & Dredging Co., Ltd.

time, was considered adequate to produce 265,000 tons of newsprint a year.

Prior to completion of No. 8 there were four comparatively old machines at Powell River and three wide, fast machines. It was considered that with the building of No. 8, together with modernization of the existing three fast machines the mill would be given sufficient capacity to produce most of the total newsprint potential the power plants could support.

The new setup makes it possible for the company to transfer some newsprint capacity from the old mill to the new and two of the older machines may be diverted from the manufacture of newsprint to other products. Furthermore, it becomes possible to divert two of the narrow, slow machines remaining on newsprint to special news grades or other paper

The No. 8 machine, built by Dominion Engineering Co., is equipped with a sectioned Harland drive developed by Harland Engineering of Alloa, Scotland, and supplied by Bepco (Canada) Ltd. The main Harland motor generator set is coupled to a DeLaval back-pressure steam turbine through which all process steam required by the machine is passed.

Ahead of the machine are four size 3A-100 Bird inward flow paper screens, manufactured by Canadian Ingersoll-Rand Co., Ltd., at Sherbrooke, Que.

For the objective of cleanliness and improved quality of finished product on the new machine, all concrete stock chests, flumes and other stock preparation equipment are protected by ceramic linings. Canadian Stebbins Engineering and Manufacturing Co., Ltd., of Montreal, installed over 23,000 square feet of corrosion-resistant linings in the paper mill extension program.

The Men Behind Powell River's No. 8

Almost everyone in the operating departments of Powell River Company played some part, large or small, in getting No. 8 in operation, and the project really dates back to when R. Bell-Irving began preparing preliminary plans, later to be executed by head office men such as P. R. Sandwell, then chief engineer (now in a consulting firm), assisted by Sven Quist, project engineer (and the able staff at Powell River under Resident Manager Russell M. Cooper, who played a major role in the overall program, because of his experience with high speed machines at Baie Comeau).

Among others participating prominently in the job were Harold Moorhead, resident manager, and Glen Goumeniouk, one of the designers of the new type of stock inlet; Howard Urquhart, assistant resident manager; Harry Andrews, technical director; Don MacLaurin, control superintendent, and F. R. Riley, paper mill superintendent.

Mill staff members working directly on the project were Ross Black, Arthur Gardner, Walter Snyder, Al Hansen, Ron Stewart, Mel Julsen, Ewart Craigen, Tom Wyborn, Al Chard and Andy Devlin, and the following were associated with No. 8 by reason of expanding facilities to supply the machine with pulp: Bill MacGillivray, Dick Bledsoe and Bob Fletcher.

Stock Inlet Description

No. 8's stock inlet may be described as a pressure-controlled, gravity-accelerated combination flowbox and slice. It consists of a totally inclosed structure incorporating a region of deceleration and spreading, followed by a region of acceleration terminating at the outlet, or slice.

Because the flow pattern through a conventional open head box varies with changes in the static head behind the slice, as required for various speeds, the conventional stock inlet has generally been limited in range. Uneven flows across the slice, due to cross currents developed in an open headbox are only unimportant at low speeds.

In the case of high machine speeds, the design of a stock inlet, in the opinion of the Powell River Co., should be such that the flow pattern remains reasonably constant throughout the full range of speed for the paper machine. This has been accomplished in No. 8's stock inlet, which is so designed that the regions of both deceleration and acceleration are separated by a region of fixed level, maintained by means of a level control.

The elevation of the fixed liquid level within the stock inlet has been established arbitrarily to provide a reasonable head for gravity acceleration, with due regard for the space available below the machine room cranes. A vapor space above the liquid provides a means of varying the slice jet speed without varying the level of the liquid. It also aids the removal of entrained air.

Agitation of liquid pulp stock in stock chests and tanks and the cascading of liquid from machine screens into the conventional open type headbox causes air to be entrained by the stock. Due to the rapid passage of the stock through an open headbox, not all of this entrained air is able to escape and is, therefore,

"RIPCO MAID" . . . Rhinelander's huge new Beloit Fourdrinier machine for making glassine and grease-proof papers is seen above. Rhinelander Paper Co. blazed a trail with the "Big Swede" in 1941 and now takes another long stride forward with the ultra-modern "Ripco Maid." As designer and builder of these two machines, Beloit Iron Works knows their capabilities, and extends congratulations to the management and entire staff at Rhinelander for notable leadership and outstanding paper production.—*Beloit Iron Works, Beloit, Wisconsin.*

carried through the slice onto the Fourdrinier wire. The zone of low velocity under the vapor space in the No. 8 inlet encourages disengagement of the air at that point, and is assisted in this respect by the vacuum which is maintained in the vapor space.

The Foxboro control equipment for the stock inlet pressure system consists of a recording machine speed tachometer which, by means of a pneumatic system, resets a recording stock inlet level controller which in turn controls the Masoneilan vacuum control valve to paper machine speed. The tachometer is actuated by a small, direct current, pilot generator connected to the Harland master drive shaft. This pilot generator produces a current whose voltage varies in direct proportion to paper machine speed.

The couch tachometer air transmission system transforms the tachometer speed reading into relative air pressures. In addition to the usual recording pen the couch tachometer is equipped with a large indicating scale, calibrated in feet per minute arranged so that paper machine speed can be observed by the machine operators within a reasonable distance of their control panel board. A separate manual control assembly is located in the tachometer case.

The Foxboro stock inlet pressure controller is equipped with two recording pens, one of which records the stock inlet pressure and the other the paper machine speed, as transmitted from the couch tachometer. The stock inlet pressure controller is actually a ratio controller, with two pen-arm assemblies which vary a single pneumatic control point setting. The effect of the controller is to maintain any set relation between machine speed and stock inlet pressure.

The process flow arrangement for No. 8 stock inlet requires automatic level control for the Bird screen outflow flume.

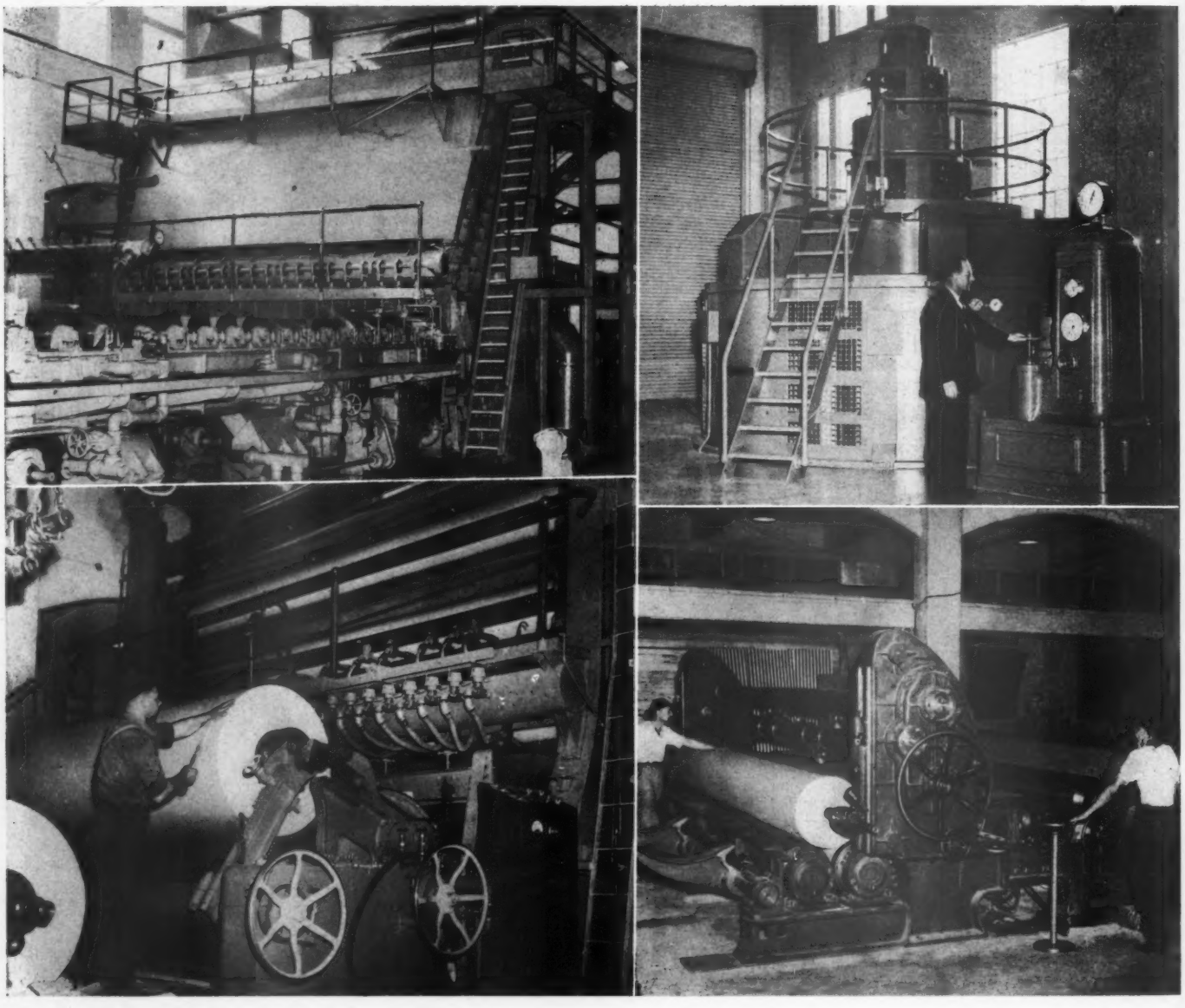
Fourdrinier Section

The Fourdrinier section is of conventional removable type. It is provided with centrifugally cast bronze breast and wire rolls, rubber-covered steel table rolls, plastic-coated table roll baffles and plastic-coated steel suction boxes. The suction couch roll is equipped with a double-compartment suction box and top pressure rolls.

Air-electric automatic control of wire tension has been provided. It is simple in design and operation. A wire tension roll is mounted on a centrally pivoted lever arranged so that the weight of the tension roll can be counter-balanced by a diaphragm assembly. The pneumatic control equipment consists of an open-pen

VIEWS OF NEW MACHINE AT POWELL RIVER. Upper left—Stock inlet of No. 8 machine, totally enclosed, is one of unconventional features. It is pressure-controlled, gravity-accelerated combination flowbox and slice. Upper right—This additional 18,000 KVA generator was required at Stillwater, B. C., power plant to provide energy for new newsprint machine.

Lower left—Pope reel with calender in background; remote air jet system was supplied by Ross Engineering of Canada, Ltd. Lower right—Winder is part of main installation of new newsprint machine.



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Catalogues on Request

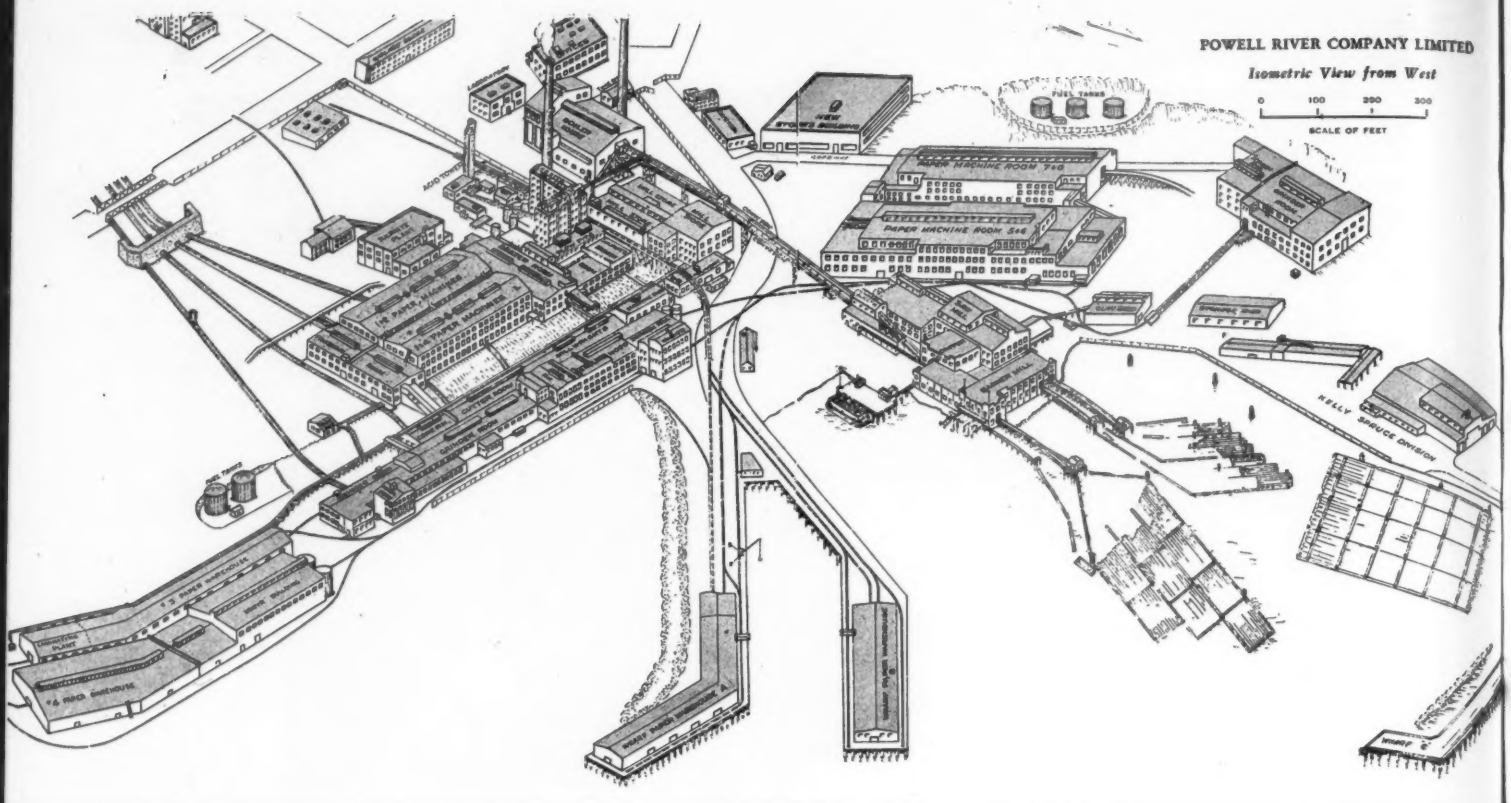
Above is the shop assembly of the dryer framing of one of Dominion's post-war machines — designed to give mechanically satisfactory operation of *2000 feet per minute.*

That such speeds, with high efficiency, are becoming possible is in itself convincing indication of the advances achieved in the production of modern high speed newsprint machines.

In that development, Dominion's Paper Division has long held an established position of leadership — a leadership which is being maintained by the continuing development of improved designs to achieve higher operating speeds and efficiency — and lower operating and maintenance costs.

DOMINION ENGINEERING Company LIMITED

MONTREAL CANADA
TORONTO WINNIPEG VANCOUVER



reference pressure recorder and two remote-manual air control valves, all mounted as a unit on a single control panel board section which forms a part of the main control board.

The Fourdrinier section is equipped with eight oscillating suction boxes, which are connected to individual barometric legs. The vacuum control system for the suction boxes consists of individual Broughton vacuum reducing and relieving valves connecting the barometric legs to a common vacuum header.

Press Section

The press section has two suction presses arranged for automatic loading. Inclosed gear top lifting mechanisms are used. The press roll loading equipment is conventional. The front and rear of each press is equipped with a diaphragm type load applicator arranged so that an increase in applied air pressure will increase the linear press roll nip pressure. The diaphragm assemblies are arranged for loading only. The top press rolls are lifted by means of handwheels. The individual front and rear load applicators are unloaded by means of separate remote manual control valves.

Both presses have been equipped with broke conveyers designed to gather broke discharged by the press roll doctors during the breaks. The individual conveyors are started and stopped manually from push-button stations.

Dryer Section

The dryer section contains 52 main dryers and ten felt dryers, arranged in four sections. It has a Ross Engineering of Canada, Ltd., hood with separate sliding aluminum panels. The drying cylinders run in Michel pivoted shoe bearings and are driven through single helical gearing completely inclosed in the rear frames. All gears and bearings are lubricated under pressure by means of a central Bowser oil filtration and cooling plant. Condensate is removed from the drying cylinders by a Dominion-Cram baffle and syphon system.

Drying controls consist of a pressure-compensated temperature controller complete with a remote manual control unit and a recording dryer steam flow meter.

Calender and Reel

The calender is of heavy design, equipped with hollow dynamically balanced rolls carried in anti-friction bearings. It is equipped with a start-up oil-pressure pump and storage tank. To insure that high pressure oil is available for the bottom calender roll bearing previous to start-up, the oil pump motor is interlocked with the Harland calender section starting equipment.

The reel is of the Pope type, designed to produce reels of double the normal diameter. The Dominion winder is of the double drum type, with individual motor-driven slitters and automatic roll discharging equipment. There is no rewinder directly adjoining No. 8.

Sectional Electric Drive

The Harland sectional electric drive for No. 8 machine represents the latest development in that line. The individual section motors all operate at a normal top speed of approximately 1000 R.P.M. The heart of any sectional drive is the equipment for maintaining intersection speed control. For this purpose the Harland drive utilizes the mechanical differential. It also makes use of a system of reduced voltage for starting and slow running.

A separately driven low voltage crawling generator supplements the main generator and exciter. For starting each section, its motor is first connected to the crawling generator. One section or all sections can be run from this generator at crawling speeds. To run the sections at full speed the section motor is transferred automatically from the low voltage crawling bus to the main running bus. Resistance in series with the armature is then cut out automatically with a suitable number of steps to bring the section up to top speed.

Ross Heating and Ventilation

No. 8 is equipped with a Ross heating and ventilating system, arranged for semi-automatic control. Provision has been made for the possible future addition of sectional hood humidity control.

Vapor removal and ventilation in the Ross Engineering system are accomplished by the introduction of fresh air at both ceiling and working levels, the air being exhausted through the hood and plenum chamber to the dryer section.

The broke system is so arranged that momentary surges of broke can be stored within it for a reasonable time. It can be returned to the machine system without increasing the broke content of the mixed stock beyond a predetermined percentage

The broke system as a whole consists of a broke storage tank (which stores broke from both the wet and the dry end of the machine); a couch broke tank (which stores couch trim broke or couch

POWELL RIVER COMPANY LIMITED

OFFICE OF THE PRESIDENT

VANCOUVER, B.C.

October 12, 1948.

Mr. F. R. Killam,
Industrial Coatings Ltd.,
237 E. 4th Avenue,
Vancouver, B. C.

Dear Mr. Killam:

It is indeed a pleasure to write and express to you our appreciation for the very fine job your company did in connection with the fittings for our No. 8 Machine.

Your company undertook to manufacture all of the coated fittings, vats and other equipment for us. We had complete confidence that you would have the work ready in time and you did not disappoint us even though there was very short notice given on some of the delivery dates.

Our association with your company was very pleasant and I do appreciate the very fine cooperation and personal interest we received from you and your staff at all times.

With kindest regards and best wishes.

Yours very truly,

Harold S. Foley

Harold S. Foley
MMF

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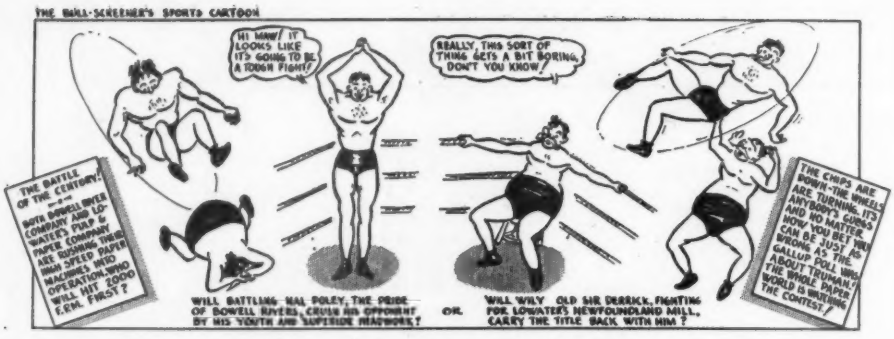
THE BULL-SCREENER'S SPORTS CARTOON
HI MAW! IT LOOKS LIKE IT'S GOING TO BE A ROUGH FIGHT!
REALLY, THIS SORT OF THING GETS A BIT BORING, DON'T YOU KNOW!
THE BATTLE OF THE CENTURY!
BOTH BOWELL RIVER COMPANY AND LOWATER'S PULP & PAPER COMPANY HAVE RUSHING THEIR HIGH SPEED PAPER MACHINES INTO OPERATION...WHO WILL HIT 2000 F.P.M. FIRST?
THE CHIPS ARE DOWN—THE WHEELS ARE TURNING—IT'S ANYBODY'S GUESS AND NO MATTER HOW YOU BET YOU CAN BE JUST AS WRONG AS THE GALLUP POLL WHO ALL BUT TRUMAN. THE WHOLE PAPER WORLD IS WATCHING THE CONTEST!
WILL BATTLING HAL FOLEY, THE PRIDE OF BOWELL RIVERS, CRUSH HIS OPPONENT BY HIS YOUTH AND SUPERIOR MUSCLES?
OR.
WILL WILY OLD SIR DERRICK, FIGHTING FOR LOWATER'S NEWFOUNDLAND MILL, CARRY THE TITLE BACK WITH HIM?

THROUGH COURTESY of Stadler, Hurter & Co., Montreal, we are reproducing this cartoon from a humorous greeting card we received from that engineering firm. R. M. BROWN, Instrumentation Engineer for Stadler, Hurter, is the artist.

The friendly "race" between Powell River Co. and Bowater's Newfoundland Mills for a new world's speed record with their newsprint machines was his inspiration. President Harold Foley of Powell River got a chuckle out of it, and no doubt Sir Eric Bowater, over in London, did, too.

broke as produced during a full wet end break); a Waterous broke beater (which provides some surge capacity during dry end breaks), and press broke conveyers (for the convenient disposal of broke from the press doctors during breaks).

A separate broke refiner assists in breaking up broke chips immediately prior to their being pumped to the machine furnish proportioner.

Consistency regulators precede rotary volume meters which have been arranged for automatic control.

The combined consistency regulator and stock meter vats were so designed by Pulp Bleaching Co., Seattle, that the consistency detection unit works on the total volume of the flowing fluid. The detection unit is preceded by a small agitator which mixes the dilution water and stock before the stock reaches the consistency regulator. The meters which follow the consistency regulators are variable speed, eight-compartment, Neoprene-coated, horizontal drums.

A multiple compartment sewer loss metering weir box gathers effluent from the saveall, overflow from the white water tank and floor drainage from the Fourdrinier section.

Arrangement of Equipment

The arrangement of equipment around No. 8 called for several deviations from those established for Nos. 5, 6 and 7 machines. The four Bird screens, are in the beater room at operating floor level instead of up alongside the headbox. The mixed stock jordan is in the machine room at the rear of the Fourdrinier. Two variable speed Bingham fan pumps supply the Bird screens and stock inlet.

Hand-operated throttle and by-pass valves were eliminated wherever possible, and all control instruments were supplied with remote manual control switches and regulators by means of which the operators can place nearly all process functions under remote manual control, as required.

All electrical controls were arranged for central remote operation. Pneumatic and electrical controls were consolidated on central panel board. Unitrol motor starter cabinets are used throughout the project. In the interest of uniformity one type of control instrument was selected for the major portion of the installation.

Pneumatic transmitters are used in nearly all cases except for air bubble type liquid level units.

List of Major Contractors and Suppliers for No. 8 Newsprint Machine of Powell River Co.

General Contractors	B. C. Bridge & Dredging Co., Ltd., Vancouver, B. C.
Stock Inlet	Vancouver Engineering Works, Ltd., Vancouver, B. C.
Paper Machine through Winder	Dominion Engineering Co., Ltd., Lachine, Que.
Sectional Electric Drive	Bepco (Canada), Ltd., Montreal, and Harland Engineering, Alloa, Scotland
Heating and Ventilating System	Ross Engineering Co. of Canada, Ltd., Montreal
Stock Chest Linings	Canadian Stebbins Eng. and Mfg. Co., Ltd., Montreal
Four 3A-100 Bird Screens	Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
Lubricating System	F. S. Bowser Co., Ltd., Vancouver
Steam Turbine	B. C. Equipment, Ltd., Vancouver, for DeLaval Steam Turbine Co., Trenton, N. J.
Stock Pumps and Fan Pumps	Bingham Pump Co., Portland, Ore.
Electric Motors	Westinghouse Corp., Hamilton, Ont., and Canadian General Electric Co., Toronto
Electric Switch Gear	Northern Electric Co., Montreal
Transformers	Bepco (Canada), Ltd., Montreal
Agitators, Stock Meters and Consistency Regulators	Pulp Bleaching Co., Seattle
Automatic Control Instruments	Peacock Bros., Ltd., Montreal; Foxboro Co., Foxboro, Mass.
Automatic Control Valves and Regulators	Mason Regulator Co. of Canada, Ltd., Montreal
Vacuum Control Valves	A. E. Broughton Co., Glens Falls, N. Y.
Instrument and Control Panels	Langley Mfg. Co., Vancouver, B. C.
Stock Valves	Engineering & Machinery, Ltd., Vancouver; Terminal City Iron Works, Vancouver
Plastic Coatings	Industrial Coatings, Ltd., Vancouver
Vacuum Pumps (Nash)	Nash Engineering Co. of Canada, Montreal
Broke Beater	Waterous Limited, Brantford, Ont.
Mixed Stock Jordan	Port Arthur Shipbuilding, Ltd., Port Arthur, Ont.
Broke Jordan	E. D. Jones & Sons Co., Pittsfield, Mass.

Northernmost U. S. Timber Sales Approved by Secretary of Interior

Cutting rights in the most northerly portion of the United States, the historic Northwest Angle of Minnesota, has been granted Minnesota and Ontario Paper Co. by the Secretary of the Interior. A 25-year contract applies to 52,841 acres of timber sold at auction. The land belongs to the Red Lake band of Chippewa Indians, and comprises 70% of the 130-square mile Northwest Angle peninsula.

"Our immediate management problem," said Mr. Davis, "will be the harvesting of the mature and over-mature stands of merchantable timber on a sustained yield basis." He added that Mando, once in full operation, expected to exceed the minimum cut as outlined in the terms of the contract.

German Woodlands Greatest In American Zone

Newsprint Service Bureau, New York, has published "Forestry in Germany," by C. A. Schenck, founder of the Biltmore Forest School, as a paper-covered, 42 page booklet containing several tables and discussions of present and prospective conditions; $1 per copy.

He reports that 8,610,000 woodlands acres are in the American Zone; 7,064,000 in the Soviet; 4,520,000 in the British, and 3,853,000 in the French. Of Germany, 27% is wooded, more than any other European country except Sweden and Austria. Of 25-acre holdings, or less, 20% are in American Zone; only 11% in Soviet.

New Boiler for Mill At Roanoke Rapids, N. C.

A new Combustion Engineering 200-ton recovery boiler is being installed at Halifax Paper Co., Roanoke Rapids, N. C., and the super structure is being built by C. M. Guest & Sons of Anderson, N. C., and Greensboro, N. C.

An improvement program involving other auxiliary equipment is proceeding according to schedule and production is increasing with the installation of each new piece of equipment.

APA Engages Forest Engineer

The American Pulpwood Association has engaged W. S. Bromley, of Ironwood, Mich., as forest engineer for the Association. Mr. Bromley will be in charge of the mechanization program and he will also have under his direction the conservation program and other allied forest activities.

He graduated from Penn State in 1931 and later earned his M.F. at Yale. He served on the faculty of the Forestry School of the University of Michigan two years. At the close of the war he opened his own consulting business in Ironwood.

Herty Lab Moves

Herty Foundation Laboratory has moved from its old location at 510 West River St., Savannah, Ga., to a new location in the southeastern shipyard site at that city.

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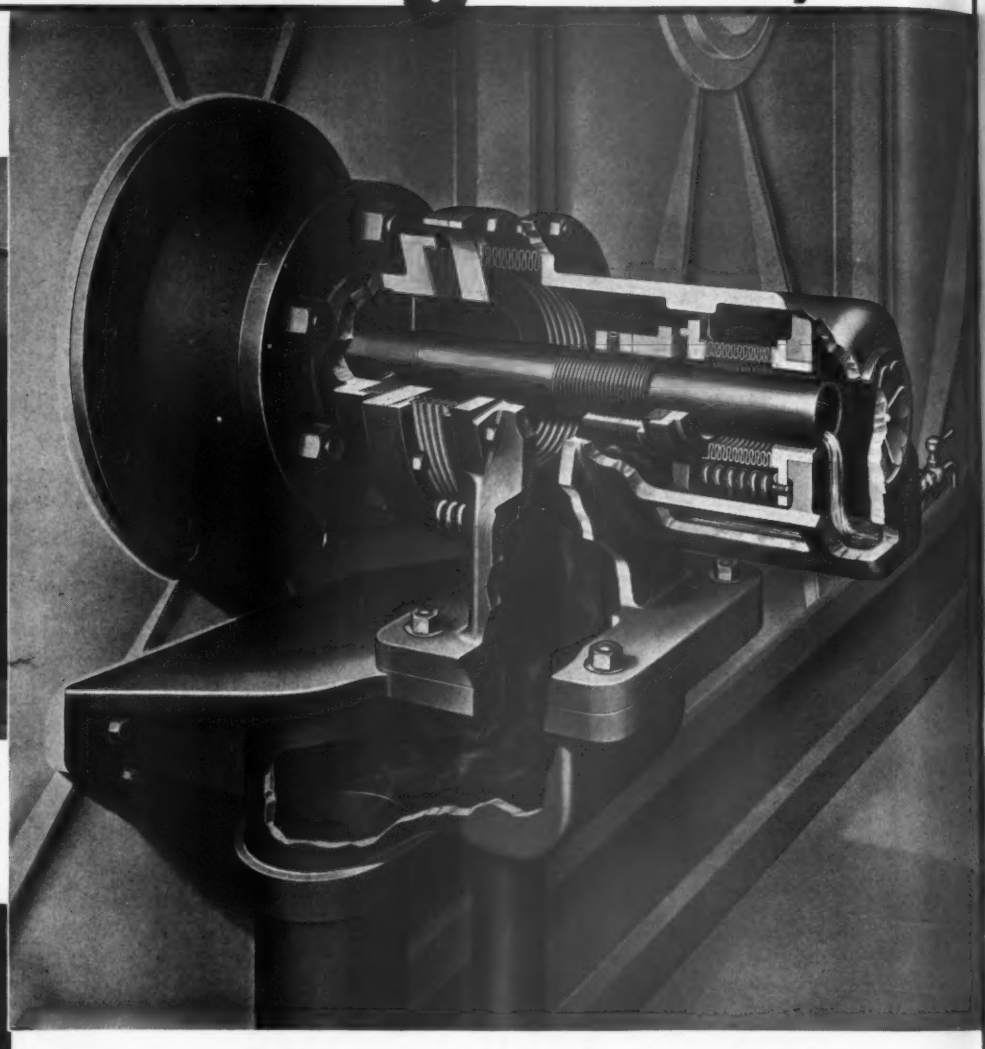
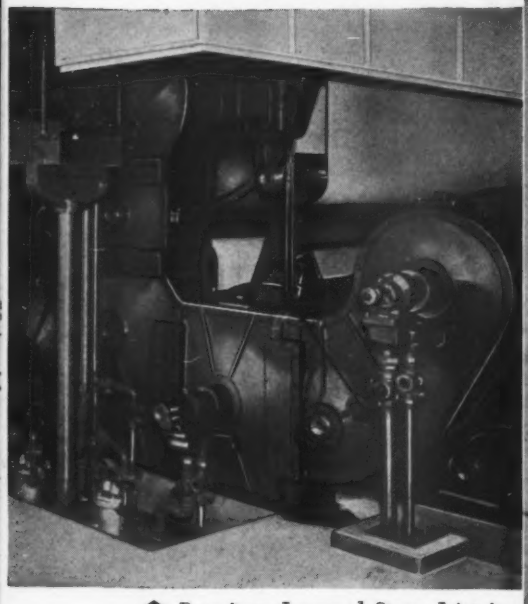


Cutaway view of Puseyjones Improved Steam Joint



Puseyjones Improved Steam Joint installed on Dry Part having enclosed type gearings. Can also be used on Dry Part with open type gearing by attaching bracket to special outside pipe structure.

Supporting bracket for Puseyjones Improved Steam Joint with vertical steam and water piping attached. See water passage within the bracket.

Now More than 2,000 Successful Installations

"So low in power consumption . . . so economical in maintenance . . . so easy to replace worn parts without shutdown . . . so trouble-free in operation . . ." These are just a few of the mill reports on the Puseyjones Improved Steam Joint. There are more than 2,000 now in use.

In the "Steam Joint Bulletin," we give full details on this remarkable new development, describing its application in connection with modern siphon type evacuators. Write for your copy today.

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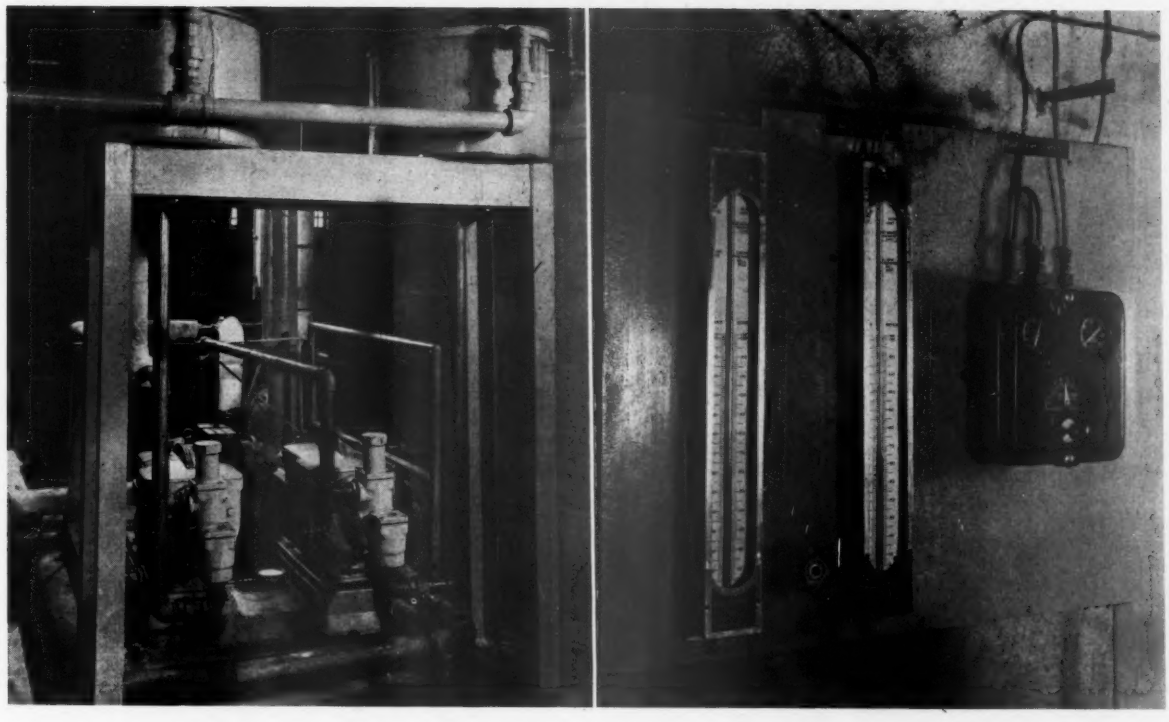
Wilmington 99, Delaware, U. S. A.

THE SIGN OF TRADE MARK SUPERIOR QUALITY

AUTOMATIC ROSIN EMULSIFIER

At Finch, Pruyn and New Tacoma Mill



PARTS OF FINCH PRUYN EMULSIFYING PROCESS—Left, Pioneer installation of the Hercules automatic emulsifying process in Glens Falls, N. Y. mill of Finch Pruyn and Co. Here the installation has been adapted to extremely close quarters. Variations in placement of simple units are possible. Right, Instrumentation is simple in this automatic process, including tank-level indicators for liquid prepared mill size and temperature control device.

Three years ago Finch, Pruyn & Co., Glens Falls, N. Y., turned from the manufacture of newsprint to a concentration on groundwood specialty grades and additional lines of higher quality. Later (see June, 1947, **PULP & PAPER**) the company completed alterations and modernization to fit in with its new program. More recently, the historic mill made a pioneer installation of a process which has national interest—the automatic emulsification of rosin size.

The new process was developed by Hercules Powder Co., to enable paper mills to reduce labor costs, reduce space requirements, and provide a size emulsion of great uniformity of concentration and quality.

The first far western installation has been made in the spanking new modern paper mill built by St. Regis Paper Co. in Tacoma, Wash., which began producing bag paper early in January on its new 2,100 f.p.m., 168-inch Pusey & Jones Fourdrinier machine.

The automatic emulsifying process utilizes a Triplex Unit consisting of three properly dimensioned proportioning pumps each driven by a single motor. Thus size, hot water, and cold water—the three components necessary for proper rosin size emulsification—are delivered at definite predetermined rates. Each pump in the Triplex Unit is individually adjustable as to output, creating maximum flexibility in meeting various conditions.

In both the St. Regis and Finch, Pruyn installations—as in all installations of the process—the paste rosin size flows from a storage tank through a heat exchanger where temperature is brought to a predetermined value, controlled automatically by a temperature regulating valve, and flows into the rosin size pump of the Triplex Unit. Hot size is pumped to the ejector where it is combined through Venturi sections with a stream of hot water from one of the pumps of the Triplex Unit to form the primary emulsion. This primary mixture then flows through the turbine mixer for further mixing. The emulsion then flows to a small storage tank with a capacity for four to six hours mill supply where it is diluted to final concentration with cold water from the third pump.

Size emulsion is drawn from the supply tank as needed. The automatic feature is made possible by a float control device in the tank which starts and stops the motor of the Triplex Unit. Only labor required is preventive maintenance.

Finch, Pruyn finds increased uniformity of emulsion in the process, and reduction of storage capacity and floor space requirements. Low, instead of high pressure steam may be used. The Glens Falls installation is in the basement of the mill next to the hydrapulper foundation. Capacity of the tanks for rosin paste solids is about 6,000 gallons. The emulsion ready for use runs from 4 to 5%.

Installation At Tacoma Mill

The Tacoma installation is at one end of the new and impressive 600 ft. long concrete and steel St. Regis plant.

Before the pressure-inlet Pusey & Jones machine had even started up at slow speed last month, the Hercules-engineered operation had a 6,000 gallon tank filled with 4% emulsion ready for use—all made up for the new machine.

Here, tank cars from the Portland, Ore., rosin and chemicals plant of Hercules bring in the paste rosin. Each tank car is heated, to make its contents fluid, and compressed air unloads the rosin into a 15,000 gallon tank on the paper mill operating floor.

It is between this tank and the previously mentioned 6,000 gallon tank that the emulsifying apparatus is installed. One of the distinguishing features of this new paper mill is that all water, oil, stock and other lines are in identifying colors, and the Hercules operation is similarly identified, with red piping for steam, blue

for cold water, orange for hot water and yellow for rosin.

Cold water is used to stabilize the rosin and hot water to pump it, the trick being to keep the paste just hot enough to pump.

After the paste is cut down to 4% emulsion, an automatic float control operates on the emulsion tank. Here is a Fischer & Porter Flowrater for control ahead of the machine.

Milton J. Maguire, district manager for Hercules in the Pacific Northwest, explained that the Hercules process eliminates an attendant and greatly saves in operation and storage space requirements. Under the old batch system of producing the emulsion, an attendant generally would work eight hours but have to fill three or four times the storage capacity installed at St. Regis, in order to carry through 24 hours production on the machine.. St. Regis will require only maintenance service here, checking pumps, etc. It is very roomy in the area of this St. Regis installation, with no crowding of equipment, and this is enhanced by the fact that the mill was built wide enough for a second machine, when (and if) desired. This Hercules equipment, at the far end, is ahead of a row of ten big E. D. Jones & Sons Majestic jordans with their 400 hp. General Electric motors.

There is also automatic pH control of the alum ahead of the machine.

The Hercules emulsifying process as pioneered by St. Regis and Finch, Pruyn and Co. was developed primarily in the service and development department of their Papermakers Chemical Laboratory at Kalamazoo, Mich. While Hercules has made no such additional claims for the process, it is possible that it might be applied, with suitable changes, to other problems in the field of papermaking.

Crown Zellerbach Sells Sanitary Products Dept.

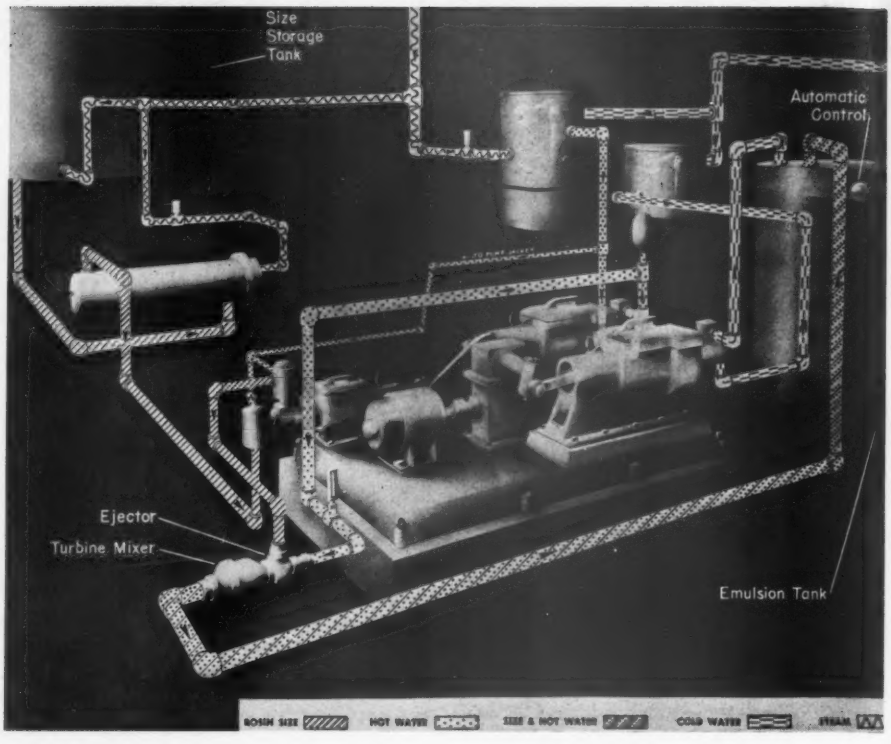
Sanitary Products and Paper Co., department of Crown Zellerbach, which distributed products of the Carthage, N. Y., mill and others, has sold its five branches. The department specialized in janitorial supplies.

The Syracuse branch was sold to eight former employes and subsequently sold to Miller Paper Co. The Brooklyn branch was sold to A. L. Scharf, former manager, Philadelphia to D. L. Ward Co.; Pittsburgh to Morris Paper Co. and Buffalo to Hubbs & Howe.

V. J. Spindler, the Philadelphia manager is retiring under the CZ Retirement Plan. J. E. Englehart, the Buffalo manager, is being transferred to Zellerbach Paper Co. on the Pacific Coast.

Stream Survey in Florida

Surveying of Florida's streams to determine what effect operation of pulp and paper mills has on them will be conducted during 1949. The survey will be financed by the National Council for Stream Improvement. It will be supervised by the Florida State Board of Health and the seven pulp and paper mills located in Florida will participate in the program.



HERCULES POWDER COMPANY'S NEW AUTOMATIC EMULSIFYING PROCESS — Installed in Finch, Pruyn mill in New York, in new paper mill built by St. Regis in Tacoma, Wash., and in other mills.

YOUNG MEN TO FORE IN ST. REGIS
Adams, Cancell in Key Posts

WILLIAM R. ADAMS (left), who on Dec. 15 became Vice President in charge of Kraft Mill Operations of St. Regis Paper Co., with headquarters in Deferet, N. Y., is shown here in front of the Tacoma, Wash., offices of St. Regis with JUSTIN H. McCARTHY, Chief Engineer of the Tacoma division.

This picture was taken by PULP & PAPER as Mr. Adams arrived for start-up in early January of new high speed Pusey & Jones bag paper machine in a fine modern plant designed by Mr. McCarthy.

The recent changes in St. Regis Paper Co. management, with Roy K. Ferguson becoming both president and chairman, and with Lyman A. Beeman departing to take over the presidency of Finch, Pruyn & Co., where he has family connections, and with Carl B. Martin retiring, has brought to the forefront two young men.

These younger executives who will actively head up most of the paper production operations are William R. Adams and Benton R. Cancell. The former will be in the kraft field; the latter in printing and converting papers.

Meanwhile, James H. Allen, pioneer of the Southern Kraft industry and president of the Florida Pulp & Paper and Alabama Pulp & Paper subsidiaries at North Pensacola, Fla., takes over the new title of vice chairman of the board.

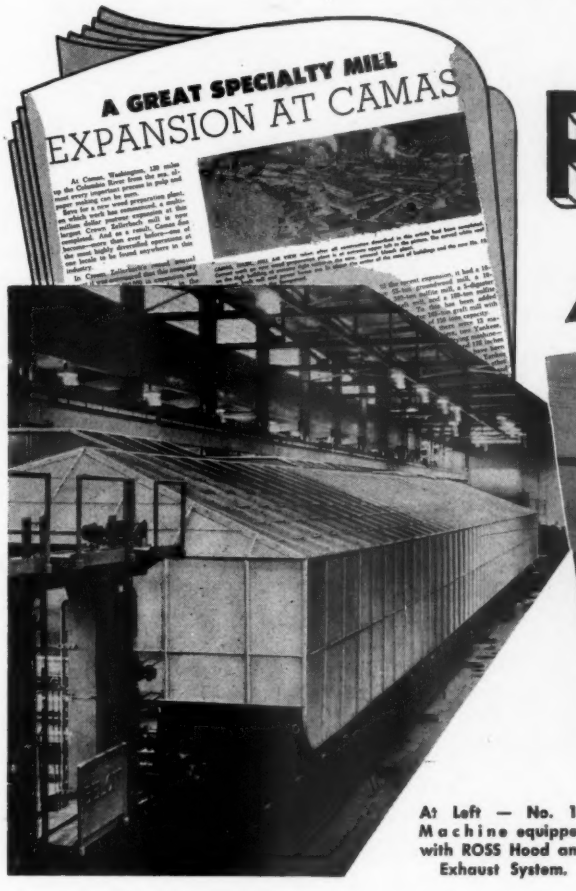
Mr. Adams, who has long been a right hand man to Mr. Martin, heads up most of the kraft operations. He has had an important "on-the-spot" role in developments at Florida and Tacoma, Wash., and he has previously been vice president of Taggart Corp., a subsidiary, and managed the mill at Oswego, N. Y. A native of Albany, N. Y., a football player of note on Watertown, N. Y. high and at Union College, Mr. Adams has been with St. Regis 12 years.

His mentor, Mr. Martin, while giving up the active vice presidency, will continue as consultant to St. Regis and other companies, living in Watertown, N. Y.

Ben Cancell, former vice president of Powell River Co., and during war years a top WPB key official for liaison work with Canada and later as director of the Forest Products Bureau, has become vice president in charge of manufacture in St. Regis' Printing, Publishing and Converting Paper Division. In 1945 he was assistant to President Ferguson, then went to Powell River, but returned last October to St. Regis and was division manager at Deferiet, N. Y.

For Both Of The New Machines At *CAMAS*

CROWN-ZELLERBACH *selected*



ROSS *Air Systems*

At Left — No. 15 Machine equipped with ROSS Hood and Exhaust System.

Above: No. 14 Tissue Machine equipped with ROSS Hood and Vapor Absorption System.

Another notable expansion and modernization program completed and again ROSS Systems are cast to play a leading role. At the Camas Mill, the industry's most diversified producer, ROSS Systems include Hoods for both machines as well as for Kraft bleach plant washers; Yankee Vapor Absorption System and complete Machine Room Heating and Ventilating equipment. The most efficient utilization of air for processing in one of the largest specialty mills in the world.

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ARKANSAS MILL UPPING OUTPUT 40%

Big Crossett Program

Crossett Paper Mills, makers of high quality kraft papers, has an expansion program under way which will, when completed early in 1950, increase its paper production by 40%. This expansion program, which began at the end of the war, has already resulted in the addition of three digesters, a 100,000 pound per hour power boiler, a 6,000 kilowatt turbo-generator, additional wood room equipment, a water treating plant and a personnel facilities building.

Yet to be completed are a new Beloit high speed Fourdrinier machine, additional equipment in the evaporator, washing and refining departments of the pulp mill, a Combustion Engineering recovery unit and alterations and modernizations in practically every other department of the mill.

Where practical the mill is being painted in accordance with the the now well known "Color Dynamics" theories for safety and generally improved working conditions.

When this program is completed, Crossett Paper Mills will be in a better position than ever to produce the high quality paper for which it is famous. The mill will be a showplace in appearance and a model for the high speed and efficient production of all grades of kraft papers.

The men engaged in planning and carrying out this expansion program include Mr. P. F. Watzek, general manager of the Crossett Companies, Mr. K. O. Elderkin, manager of Crossett Paper Mills, Mr. D. B. Kuhe, assistant manager, Mr. N. T. Beardsley, sales manager, Mr. J. C. Hair, production manager and Mr. J. H. Allen, office manager. Mr. R. W. Burnett is the paper mill superintendent, Mr. R. W. Mizell the pulp mill superintendent, Mr. L. L. Gibbs power plant superintendent, Mr. A. W. Duskin technical service director, Mr. C. W. Smith plant engineer and Mr. G. R. Lydick is resident engineer for the construction program.

K. O. ELDERKIN (left) Manager of Crossett Paper Mills; and DAVID B. KUHE (right) Assistant Manager. Together with P. F. Watzek, General Manager of the Crossett Companies, these men are planning and carrying out Crossett's significant expansion program. Mr. Elderkin went to Crossett from the Canadian industry, where he was prominent in high speed production techniques. Mr. Kuhe was long identified with IP's Southern Kraft Division mills and when this picture was taken last year by PULP & PAPER he was Manager of the Atenquique, Mexico, kraft mill.

LEADERS OF CROSSETT EXPANSION include: (Left to right)—R. W. MIZELL, Pulp Mill Supt.; ROBERT W. BURNETT, Paper Mill Supt.; A. B. MOORE, Asst. Paper Mill Supt.; L. L. GIBBS, Power Plant Supt.; and C. WAYNE SMITH, Plant Engineer.

Power plant expansion work was done by Stone & Webster, of Boston, and completed in early 1947.

Design engineering and construction in connection with the present expansion is being handled by The Rust Engineering Co. of Pittsburgh.

Description of Machines

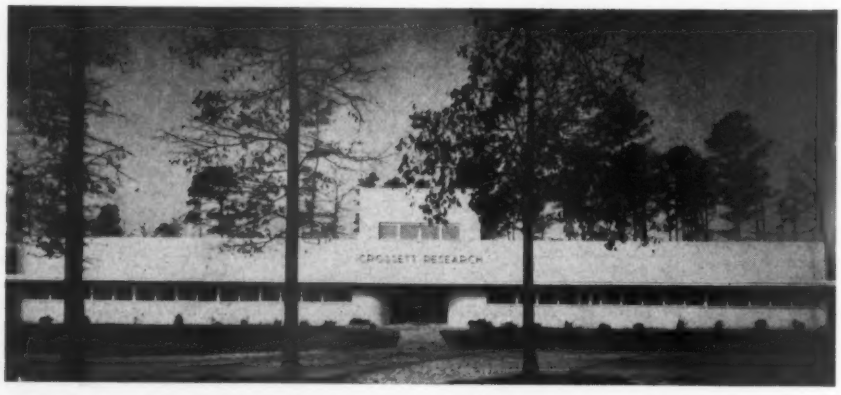
The new Beloit Paper Machine, wire width 216 inches, is designed for the production of 140 tons daily of 20-lb. to 40-lb. kraft papers at speeds up to 2000 ft. per minute.

The stainless lined headbox is to be custom built to Crossett's own design. A special press section will be used, which might be described as a high center roll dual press arrangement embodying a 60-inch diameter center roll with two Beloit rubber covered suction press rolls operating with the center roll to give two press operation. The dryer sections will have a total of 32, 60-inch paper dryers; the felt dryers will be of 48 inches diameter. A size press will be installed between the dryer sections and a single calender stack, of the openside construction, will be used. The machine will be equipped with a heavy duty Beloit reel, a Cameron winder, and Beloit automatic roll handling and unloading equipment.

Auxiliary equipment will include a Peerless fan pump, Ross Engineering hood and Nash vacuum pumps. The machine drive will be by a General Electric multiple generator drive with electronic amplidyne controls.

From his station at the wet end, the machine tender will be able to start up and regulate his jordans, start and control the fan pump, stock pumps and other auxiliaries, start the entire machine and change the machine speed.

In 1947 and 1948 a 100,000 pound B&W natural gas power boiler with fully automatic controls and a 6,000 kilowatt 40 pound extraction-condensing Westinghouse Turbo-generator set were installed. A Combustion Engineering Co. recovery unit of 200 ton capacity with a Western Precipitator Corp. unit and a D. J. Murray Mfg. Co. Cascade evaporator, is to be installed in 1949. The steam plant will



NEW RESEARCH LABORATORY of the Crossett Arkansas Companies.

Complete 300-ton per day kraft pulp and paper mill, Crossett Paper Mills, Crossett, Ark.

The original Crossett Mill and additions were constructed by Rust. Design and construction for current expansion program is also being done by Rust.

THE RUST ENGINEERING COMPANY

Engineers and Constructors

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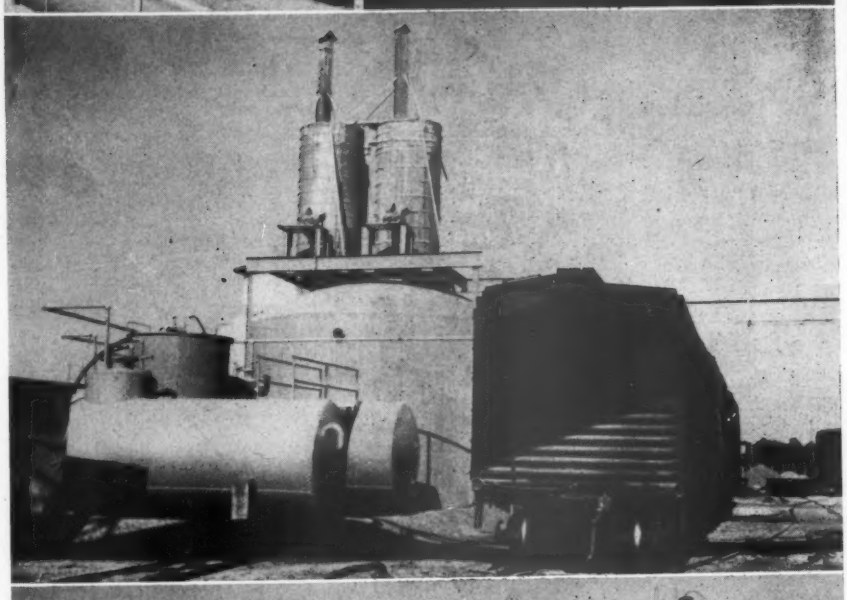
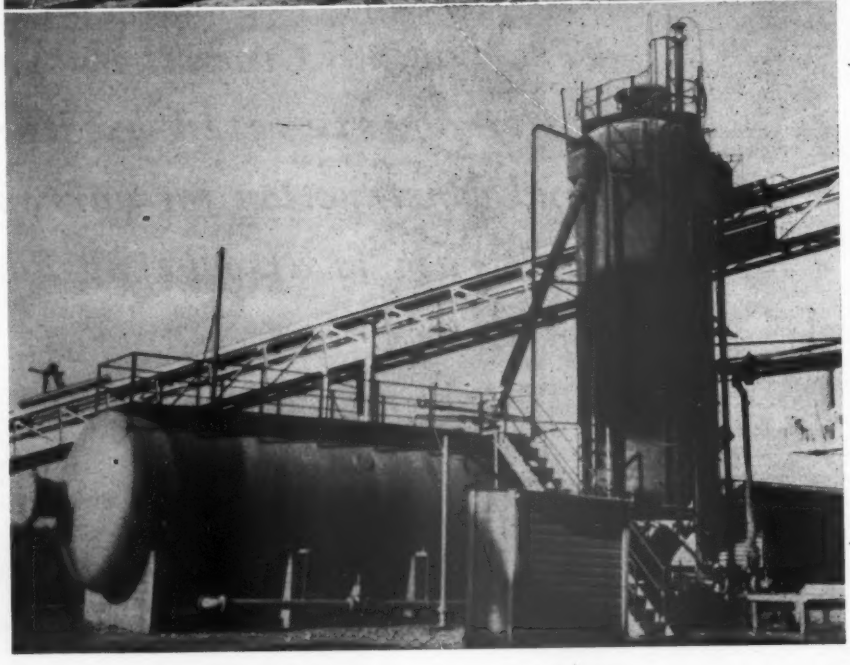
VIEWS OF EQUIPMENT AT CROSSETT. Top—In foreground, new 6,000 KW Westinghouse turbo-generator; carries 400 lb. on throttle with 40 lb. extraction-condensing unit. This unit takes place of tie-in with Arkansas Power & Light Co. In center of top picture is 5,000 KW Westinghouse 400 lb., 150 lb. extraction 40 lb. exhaust turbo-generator. Next to wall is 3,500 KW Westinghouse 400 lb. throttle, 40 lb. extraction condensing unit.

Middle—Degassifiers are mounted on top of treated water storage tank (one shown is new).

Bottom—Old digester shown has been converted into soap tank.





then consist of four power boilers and five recovery boilers. The new turbo-generator set is in addition to two older sets of 5,000 and 3,500 kilowatt capacities.

A Permutit water treating plant has been constructed consisting of two sodium and one hydrogen softener units, five pressure filters, and two degassifiers. This plant reduces the hardness of all boiler make-up feed water from approximately 85 parts per million to between two and four parts per million hardness. It supplies both the paper mill and Crossett's big lumber mill.

The pulp mill is being enlarged from 300 to 375 tons capacity. Three new eight ton stainless steel lined digesters made by A. O. Smith Corp. have recently been added to the five digesters. Prevention of corrosion, as well as prevention of iron pick-up, which would contaminate the pulp, was of vital importance. The three new A. O. Smith digesters were lined with stainless steel to overcome these problems. A five-stage evaporator set and a rotary pulp washing set are to be added. All other pulp mill departments are to be enlarged and modernized.

A building housing the time office, personnel office, a large conference room, a well appointed waiting room and locker and shower rooms for the mill's 750 employees is nearing completion just east of the main mill gate. This building is of brick and steel construction finished inside with glazed tile. Radiant heating is used throughout the building, the office spaces are air conditioned and provision has been made for the ventilation of the individual lockers through an exhausting air system.

The Research Division of the Crossett Companies has recently moved into a completely modern building. This new building provides ample space for the offices, library, laboratories and pilot plants needed in the division's research and development program.

In the late 1890's Mr. Edgar Gates of Wilmer, Arkansas, realized the value of the timber in Ashley County and promoted the founding of a lumber company. He interested his brother, C. W. Gates, Mr. E. S. Crossett, and Dr. J. W. Watzek in the project and in 1901 the lumber company and town of Crossett was founded. At that time it was believed that the timber lands near the mill would be "cut-out" in twenty years, however, the rapid regrowth of the timber on the cut-over lands encouraged the company to adopt a long range forest management program which has brought international fame to the Crossett enterprises. As a result of this forest management program, the Crossett enterprises have grown to include a much larger lumber mill than was originally planned, a chemical plant for the distillation of hardwoods, and the paper mill which was established in 1937 to provide a more balanced utilization of the products of the forest lands.

The original mill was designed by Hardy S. Ferguson of New York and constructed by the Rust Engineering Co. of Pittsburgh,

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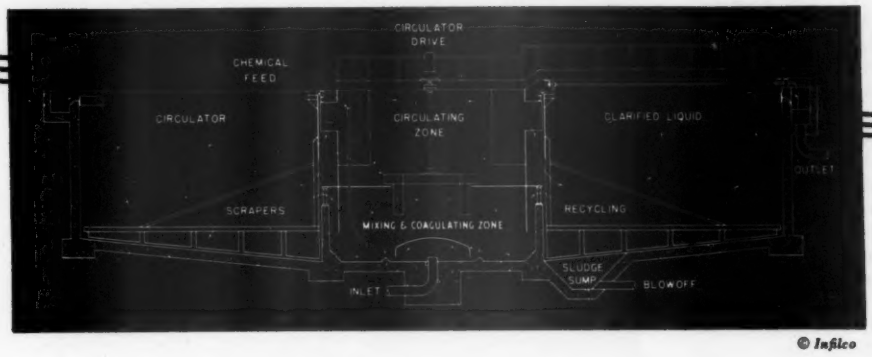

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KEY PERSONNEL AT NEW MILL

Stitt and Cash Direct East Antioch

A crack crew of key executives and technicians has been assembled by Fibreboard Products, Inc., to operate the new $18,000,000 San Joaquin Division pulp and board mill, which will go into operation at East Antioch, Calif., this year. N. M. Brisbois, vice president and head of all fibreboard operations, announced the appointments to **PULP & PAPER**.

C. M. Stitt, a Fibreboard veteran, is plant manager. Mr. Stitt has been with Fibreboard since 1924, and before that was with The Paraffine Companies. Before receiving the East Antioch assignment he had been manager of the Antioch division of Fibreboard a year and a half. Mr. Stitt is a graduate engineer from the University of California and has several times been elected mayor of Antioch.

As consultant on leave of absence from Crown Zellerbach Corp., is E. W. Erickson, who has been with CZ since 1919. He has served at Pacific Mills, Ltd., Ocean Falls, B. C.; the Camas, and Port Angeles mills of the corporation, and was resident manager at Port Townsend, Wash., for several years. He is a graduate of the University of Michigan in chemical engineering.

C. R. P. Cash has been made general superintendent of the pulp and board mill at the San Joaquin Division. Mr. Cash received his technical training at Tri-State College, Indiana, and then came West to St. Regis Paper Co.'s Pulp Division at Tacoma, and later with St. Helens Pulp & Paper Co., St. Helens, Ore. He bears the distinction of being the first chairman of the Pacific Coast division of TAPPI. Later he went east to the Champion Fibre Co., Canton, N. C., where he spent 10 years; from there he went to the Brown Corp., LaTuque, Que., and recently became general superintendent, The Brown Co., Berlin, N. H.

W. W. "Bill" Burke is office manager of the San Joaquin Division and also of the new Truckee Timber Division. He is a Fibreboard career man, having been with the company ever since he was graduated from college. Starting to work with the company in 1928 he has served with the Antioch, Sumner, San Francisco and Stockton divisions. He was at Stockton nine years as office manager.

I. R. Harcourt is engineer. He has been with Fibreboard since 1924, and came to the San Joaquin Division in 1947.

Purchasing agent and traffic manager is W. Hawkey who has been with Fibreboard since 1922. He retired in 1946 but was requested to return to duty in 1948 to help on the East Antioch project.

Assistant plant engineer in charge of power and maintenance is C. S. Carr. Mr. Carr has served for a number of years with Crown Zellenbach at Port Townsend, Wash., and also at the Rayonier plant at Fernandina, Fla.

HERE ARE FIRST PICTURES OF NEW KEY MEN who will direct operations of the new San Joaquin Division of Fibreboard Products, Inc., in East Antioch, Calif., just a few miles east of the Antioch Division. This is a 260-ton a day two-machine mill with a kraft pulp mill and semi-chemical pulp mill. These men were drawn from all regions of the continent—several of them especially widely known in the kraft field: Top row (left to right), C. M. STITT, Plant Manager; C. L. MOREY, Wood Mill and Yard Supt.; A. C. (Bob) FULLER, Board Mill Supt.; C. R. P. CASH, General Supt., Board and Pulp Mill; T. M. LINDLEY, Pulp Mill Supt.; GEO. STOODLEY, Supt., Truckee Timber Div. Middle row, L. A. LANCE, Chief Electrician; C. F. MUNT, Master Mechanic; C. S. CARR, Asst. Plant Engineer; G. B. McCUISH, Personnel Manager; W. HAWKEY, Purchasing Agent and Traffic Manager; E. A. BUSH, Instrument man. Bottom row, W. W. BURKE, Office Manager; T. S. MARKOV, Chief Chemist; CLYDE R. WILLIAMS, Power Plant Supt.; I. R. HARCOURT, Engineer; EARL BAKER, Chief Pipefitter; and A. G. NOYA, Design Engineer.

A. C. "Bob" Fuller is board mill superintendent. Mr. Fuller served from 1915 to 1930 at different Crown Zellerbach mills. In 1930 he went to the southern states to learn the kraft liner business, and while there spent two years experimenting on the use of ground wood from Southern pine. From 1936 to 1941 he was with the Australian Paper Manufacturers in Australia, as superintendent, and started that firm's kraft mill. From Australia Mr. Fuller came back to America and landed at the Brompton Pulp & Paper Co., Red Rock, Ont. He joined Fibreboard last year.

Superintendent of the pulp mill is T. M. Lindley, who was associated for a number of years with Crown Zellerbach at Port Townsend, and with the St. Regis kraft mill at Tacoma.

C. R. Williams is power plant superintendent, San Joaquin Division. Mr. Williams has served for many years in the public utility business.

Chief chemist is T. S. Markov, who has been with Fibreboard at the Antioch and Stockton divisions for the past 11 years.

L. A. Lance, chief electrician, has worked for a number of the contractors doing work at the Camas, West Linn, and Port Townsend mills of Crown Zellerbach.

C. L. Morey is wood mill and yard superintendent. Mr. Morey spent a number of years with Union Lumber Co., Fort Bragg, Calif., in logging and production.

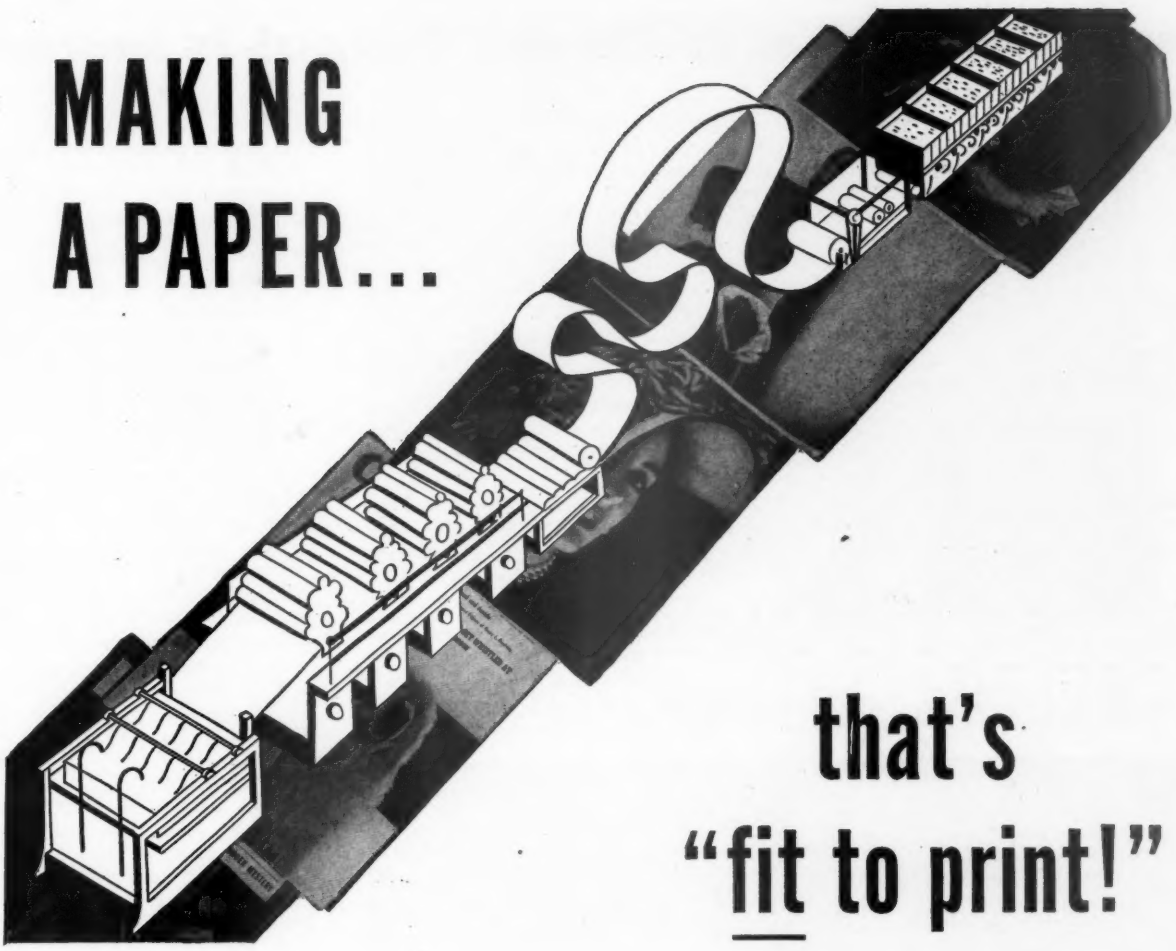
Master mechanic is C. F. Munt who has been with the St. Regis Tacoma mill and Marathon Paper Mills of Canada, Marathon, Ont., among other companies.

A. G. Noya is design engineer, who was formerly with the B. B. Maynard Co.

Chief pipefitter is D. Earl Baker, who served more than 20 years with Crown

(Continued on page 88)

MAKING A PAPER...



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NEW MACHINE AT BELLINGHAM

Improved Tissue Is Made; Output Is Increased

Pacific Coast Paper Mills of Washington, Inc., of Bellingham, Wash., has increased the capacity and improved the quality of its tissue products with a new Fourdrinier machine. Now this mill has two Fourdriniers, each a replacement of cylinder machines. One was replaced during the war. This latest virtually complete rebuilding of a machine—it can really be called an entire new machine—was carried out in the past year by getting parts from different suppliers. The result is an MD tissue product of facial tissue type quality —made like facial except it is single instead of double ply.

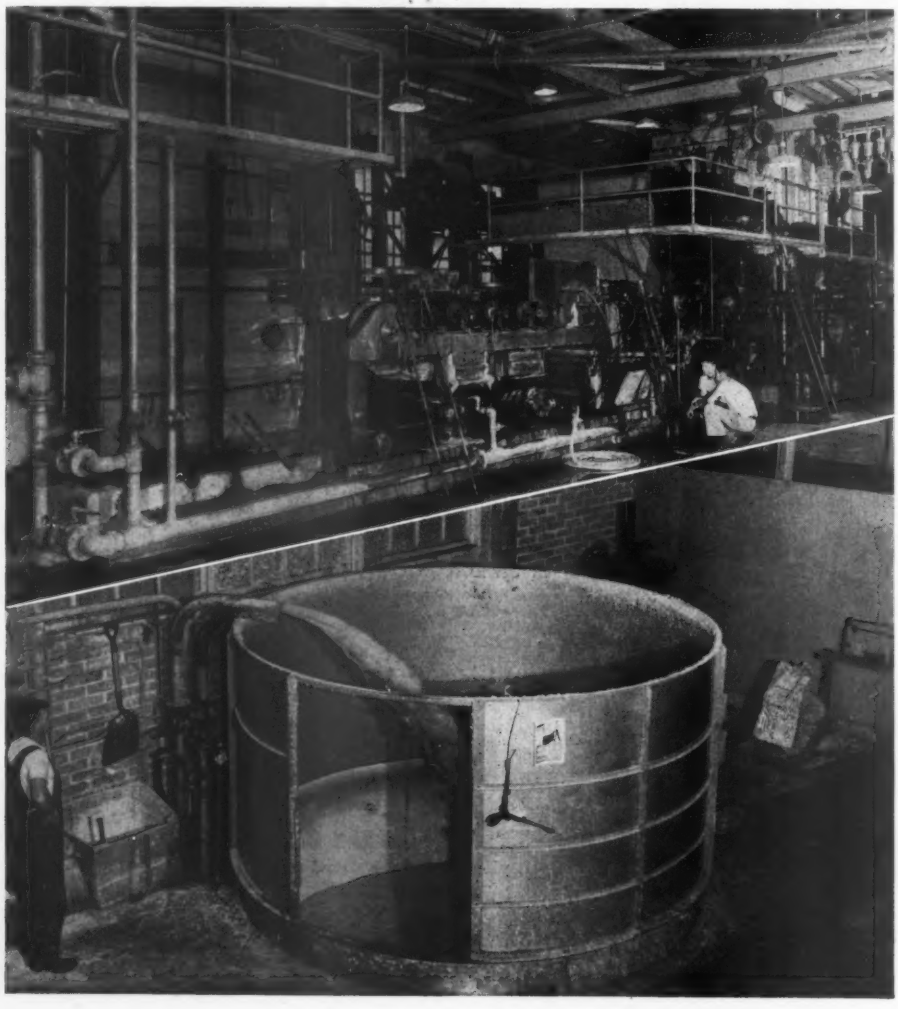
The "know-how" of the management and engineering and mechanical departments of the Pacific Coast Paper Mills staff made this possible. They selected new material and latest devices for the machine, features that made this something more than just another story of a new machine.

The men behind this job were the Herbs, father and two sons—who head up two tissue mills on the Pacific Coast—the other one being Westminster Paper Co. in New Westminster, B. C. J. J. Herb, the father and a former prominent personality in the Wisconsin and Ontario industries, is the chairman of both companies. F. J. (Bill) Herb is president of the Bellingham mill and E. M. is vice president. Their titles are reversed in the Westminster management.

Peter J. Onkels, superintendent and purchasing agent of the Bellingham mill, and another ex-Wisconsinite who worked with the elder Mr. Herb in Kaukauka, Wis., had a major responsibility in selecting and planning the new machine parts and construction materials. Also credit is due George Johnston, chief engineer.

ABOVE—WET END OF VIRTUALLY ENTIRELY REBUILT No. 2, 85-inch machine at Pacific Coast Paper Mills of Washington in Bellingham, Wash., now making MD tissue of facial type quality. At left is Monel-lined Valley Iron Works headbox. Eagle Metals Co. of Seattle supplied Monel piping for the machine. Monel is also used throughout the Fourdrinier.

BELOW—Late model 12-ft. Dilts Hydrapulper, latest installed in West. This mill also installed the first Hydrapulper in the West and the first used anywhere on tissue. The first one was installed prior to World War II.



Extensive Use of Monel

The use of Monel throughout this new machine and for pipe lines ahead of it is one of the interesting features. Other features are the General Electric electronic centrally controlled drive and also pneumatic loading on reels. But here follows a complete description of equipment, also illustrated in accompanying photos.

The Bellingham mill's No. 2 machine is 85 inches wide and it has reached average 24-hour day production of 16 tons at 950 ft. per minute. With latest addition of a new 100 lb. 10 ft. Beloit Yankee dryer, it will produce around 18 tons and operate at close to 1200 ft. per minute, if desired. The old cylinder machine it replaced was making about 7 tons a day.

Total capacity of the Bellingham mill is thus increased from about 23 tons a day to 30 to 32 tons.

Ahead of this machine is a late model Shartle-Dilts Hydrapulper of 12-ft. diameter. It is the most recent installed in the Far West. This mill had the distinction several years ago of installing the first Hydrapulper used anywhere on the continent on tissue and the first one on the Pacific Coast, a 10-ft. one serving No. 1. Two new stock chests are ahead of the machine with Western Gear Works agitators and Shartle Bros. pumps.

Shartle Miami Selectifier screen is next in the flow for No. 2 machine, with Monel piping used instead of the traditional copper and brass. This piping was supplied by Eagle Metals Co. of Seattle. They also supplied a Monel manifold between the Selectifier and headbox. The Shartle fan pump is also of Monel.

Then comes the Valley Iron Works headbox and inlet of their latest custom built design. The headbox is Monel lined throughout and is 126 inches high. The slice is fully adjustable for full pressure formation.

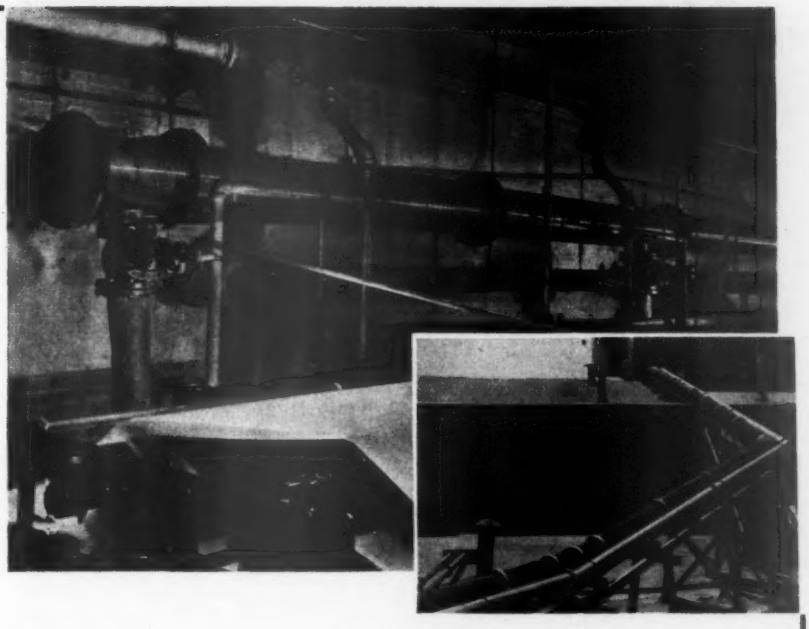
The complete Fourdrinier for this machine was furnished by Black-Clawson Co. and is for a wire 50 feet long and 85 feet wide. Monel is used throughout the Fourdrinier and was selected because of its resistance to vibration, according to the Pacific Coast Paper Mills executives.

All of this Monel, of course, was a product of International Nickel Co. Much of it was supplied by their agents in the Northwest, Eagle Metals Co., wherever used in connections and fittings.

The machine is equipped with a dandy type table roll. There are four suction boxes. A vacuum pump is on flat boxes.

There is a new Beloit rubber covered suction press, covered by Huntington

MAKE STOCK LINES OF MONEL



For • Longer Life • Lighter Lines Lower Maintenance •

From bleach house to wet machine; from building to building—overhead or underground—stock line transfer used to be a problem. But no more! Because pulp, paper, and board mills are finding that one material removes this maintenance headache in stock and white water lines.

That material is MONEL.

With MONEL—a solid, corrosion-resistant, fatigue resistant alloy — there's no more worry about leakage or line deterioration. There's no constant repair—no hours of costly down time. Strong, high strength MONEL lines fitted with readily connected MONEL joints of several types as manufactured by TAYLOR FORGE, are changing all this for long-life repair free service. Sludge and slime accumulations in stock lines are at a minimum when MONEL is used.

Whether you desire to consult one of the competent fabricators of the Northwest, or make your own lines, you can easily get all the information you want and need from

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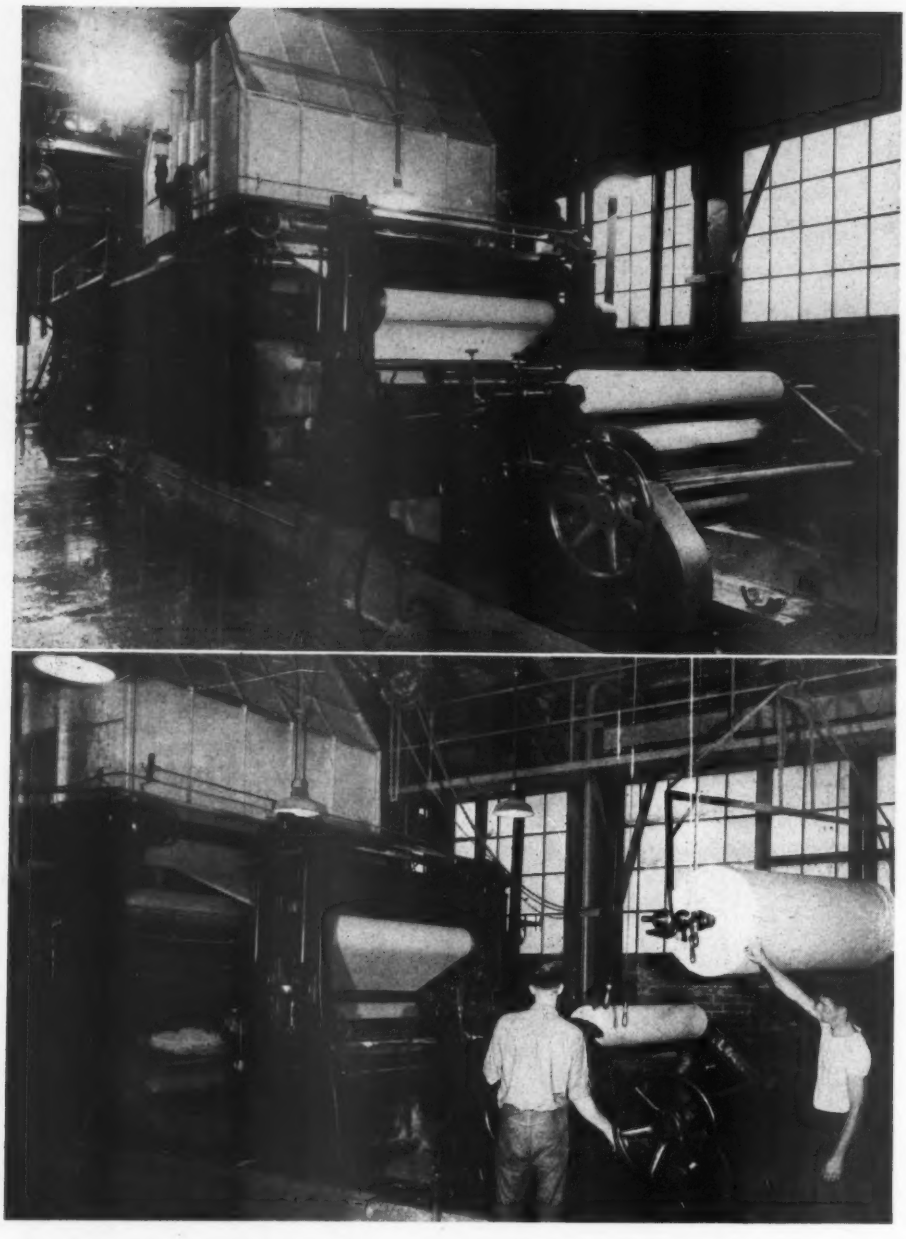


VIEWS AT DRY END OF THE NEW No. 2 machine at Pacific Coast Paper Mills of Washington. Operation at winding reel is shown. Machine is 85 inches wide. Beloit supplied Yankee dryer; Ross Engineering, the hood; Shartle and Black-Clawson, the stack and reel, all shown here.

Rubber Mills, of Portland, Ore., affiliated with Stowe-Woodward Inc., of Newton Falls, N. Y.

Larger Yankee

The new 100 lb. 10-ft. Beloit Yankee is just double the weight of the Yankee it replaces. A J. O. Ross Engineering Corp. complete hood vapor removal system is utilized for steam economy. There is a Midwest-Fulton dryer circulation system supplied through James Brinkley of Seattle.

The new Black-Clawson calender stack has two sets of softening rolls. This is followed by a Black-Clawson reel.

A General Electric direct 250 hp generator set and 200 hp. DC motor serves this new paper machine. The Amplidyne type motor, a new GE development, is on the motor generator set. GE supplied the central control board. There is pneumatic loading on all rolls.

The Bellingham mill added a new bank of 2300 volts primary and 400 volts secondary and added electrical system for this new machine. All the power used at this mill is purchased power.

Unbleached sulfite pulp purchased from the "next door" Puget Sound Pulp & Timber Co., passes through a common gate separating the two plants. Selected waste paper provides raw material for the tissue products.

The Bellingham management and staff can be proud of a job well done—a few years ago on its No. 1 machine and now again on its No. 2—to give it a modern tissue mill, in both cases up-grading the quality and increasing the amount of its production.

Scott Installs Yankee and Hydrapulper at Chester

Scott Paper Company has installed a new Hydrapulper at its Chester, Pa., mill as part of a company-wide program of improvements. Also at Chester are a new pilot plant for bleaching, new Yankee dryer which will be duplicated before the year's end and which will "materially" increase production.

At Ford Edwards, N. Y., a new conveyor is under construction, and a pulp preparation plant is building. One of the paper machines will be completely rebuilt by July of this year. Reconstruction is going to increase the capacity by about 50%.

At Sandusky, Ohio, the Cut-Rite division will have a new buliding to house additional finishing equipment. And at Marinette, Wis., new pulp mill improvements are already in operation, in addition to new laboratory facilities. Construction has begun there on a new large power construction job.

New Tuscaloosa Beloit Starts Making Light Paper

Production of paper from the new Beloit 170-inch machine at Gulf States Paper Corp., Tuscaloosa, Ala., began Dec. 6. This is the third Beloit in the mill.

When this machine has reached its stride, it will operate at 1800 feet per minute, being one of the fastest in the south, and will produce 150 tons daily of kraft bag and wrapping paper, also special finishes and markings. It will increase the production of the mill to 370 tons per day.

Its operation culminates a $6,000,000 program. Other installations: a 7500 KW Westinghouse turbo-generator; a Goslin Birmingham quintuple effect evaporator; a Babcock & Wilcox recovery boiler; Dorr causticizing, and Infilco water treatment.

Quebec Mill Installs New Ring Grinders

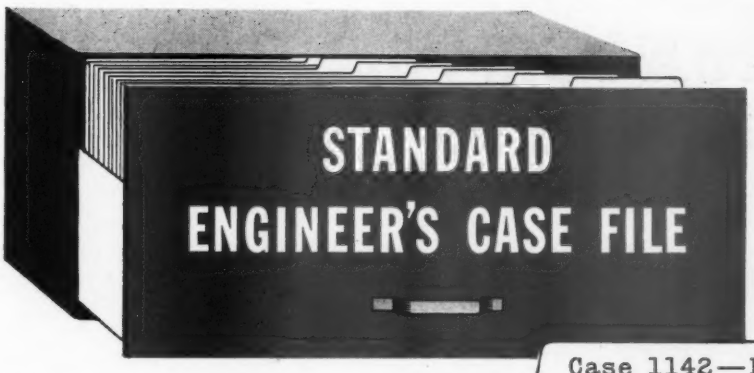
Twenty-four pocket grinders at the Gulf Pulp & Paper Co. mill in Clarke City, Quebec, have been replaced by four Wood Pulp Machinery Co. 62-in. by 54-in. ring grinders.

Each of the new grinders is coupled to a water-wheel and the production of the four machines will be 240 tons every 24 hours. Two of these machines have been installed for some time. Production of 60 tons per stone is regarded as a record.

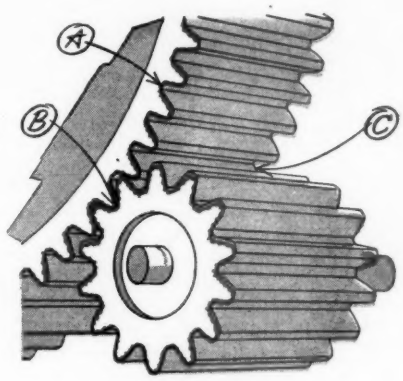
Wood Pulp Machinery Co., headed by President W. R. Tidmarsh, Toronto, is now building larger grinders to use 67-in. diameter by 54-in. face stones, each to be coupled to 3600 h.p. and the output of export pulp should average 70 short tons, air dry, every 24 hours.

Pacific Mills 20-Year Pins

Pacific Mills, Ltd., at a dinner in Vancouver, B. C., recently through President P. E. Cooper presented 20-year pins to George Sidney Bond, Bertie T. Flack, Helen Gibbons, Cecil Hawker, Cameron Hyslop, William D. Jones, William Patrick Robinson, and Erik L. Stenstrom.



Case 1142—Reducing Frictional Loss on Low-Speed Open Gears



LOW-SPEED OPEN GEARS

Extremely heavy shock loads on an open bull gear did not displace the tough lubricating film maintained by Calol Pinion Grease. Recommended for all heavy-duty open gears such as those on hoisting units, cranes, power shovels, and some grease-lubricated enclosed gears. Comes in four grades, each increasingly more adhesive: Nos. 0, 1, 2, 5.

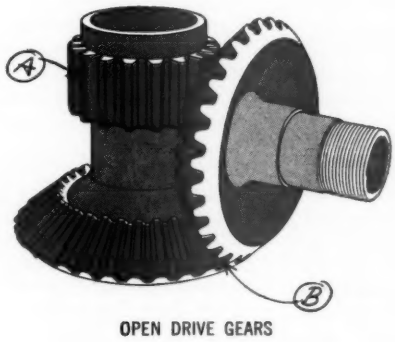
A. Sticks tight wherever applied — prevents excessive waste especially where gears move very slowly or are idle part of the time.

B. Cushions and lubricates — takes up slack between teeth and increases gear efficiency.

C. Very high viscosity but with oil-like consistency — flows back into place after being displaced by gear teeth.

Calol Pinion Grease is fully water-resistant. This assures lubrication on gears operating outdoors in wet weather or in other heavy moisture conditions.

Case 1104—Keeping Lubricant on Open Drive Gears



OPEN DRIVE GEARS

Calol Gear Lubricant did not throw off open drive gears operating at high speeds. Maintaining a constant heavy lubricating film on gear teeth, it reduced noise and wear from the shock loads. Also recommended for the lubrication of wire rope and cable.

A. Extremely adhesive — sticks tenaciously to gear- and pinion-tooth surfaces . . . stays between wires and in hemp centers of wire ropes.

B. Resists pressure and provides a tough, cushioning film — prevents metal-to-metal contact on gear teeth and reduces friction on wire rope strands.

Calol Gear Lubricant is made from selected crudes and contains a non-inflammable solvent which lightens its consistency. This solvent, which evaporates quickly after Calol Gear Lubricant is applied, permits the lubricant to be spread on gears easily and promotes penetration of wire rope and cables.

Trademarks, "Calol," "RPM," Reg. U. S. Pat. Off.

STANDARD TECHNICAL SERVICE will make your maintenance job easier. If you have a lubrication or fuel problem, your Standard Fuel and Lubricant Engineer or Representative will gladly give you expert help; or write Standard of California, 225 Bush Street, San Francisco 20, California.

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FOR EVERY NEED A **STANDARD OF CALIFORNIA** JOB-PROVED PRODUCT

MARSHALL PLAN FOR PAPER

Activities of ECA Pulp-Paper Branch

By JOSEPH E. ATCHISON

Pulp and Paper Specialist, Economic Cooperation Administration

Because of the importance of pulp and paper in the European Recovery Program, the Pulp and Paper Branch was one of the first branches to be set up in the Industry Division of the Economic Cooperation Administration. It was established on June 2, 1948 for the purpose of handling all ECA matters pertaining to the pulp and paper industry, from the raw materials used to the finished paper products.

Since its beginning, the branch has been headed by the production executive of the U. S. pulp and paper industry. The staff has been kept very small although its activities has been numerous and of a diversified nature. In addition to the Washington staff, the Paris Office of ECA has a Pulp and Paper Branch and some of the ECA Country Missions have men who were formerly in the pulp and paper industry. Members of the Washington staff keep in constant contact, by personal visits and by frequent reports, with the Paris office and the ECA Missions in each participating country.

It is the objective of the Pulp and Paper Branch to assist the participating countries in every way possible in their efforts to produce or otherwise obtain adequate supplies of pulp and paper.

To date, approximately $50,000,000 has been authorized for the procurement of pulpwood, pulp and paper by the participating countries. In line with the spirit of the act, emphasis has been placed on the supply of raw materials rather than finished paper products. Where idle pulp mill capacity has been available, the emphasis has been on supply of pulpwood to get these mills back into production. Where idle paper machine capacity has been available, supplies of wood pulp have been financed with ECA funds so as to get these machines running. Where paper machine capacity has not been available, but converting plants such as paper box factories have existed, the paperboard has been supplied which could be converted into finished boxes in the participating country. In some cases finished paper products have been financed but these have been special types of papers which were not produced in Europe and which had special industrial significance.

In addition to pulp for paper, a considerable amount of pulp has been authorized for the production of rayon and recovery of the textile industry.

Requests Are Carefully Screened

Requests for pulp and paper products have been screened very carefully and only those items deemed most essential have been given final approval. However, in reality, almost all pulp and paper items could be considered as essential to European recovery under the provisions of the act. Without adequate supplies of paper, all progress would become paralyzed very rapidly; publication of newspapers and magazines would be curtailed; packaging and labeling of merchandise would be stopped; finance, industry and commerce, deprived of adequate supplies of paper currency, records and correspondence, would break down. Sufficient quantities of paper or raw materials for its production, must be supplied if other phases of the recovery program are to succeed.

In addition to screening requests from the standpoint of their importance toward recovery, they have been screened from the standpoint of their effect upon the U. S. domestic economy. Pulp and paper items in short supply in the U. S. have not been approved for export under ECA financing. Prices also have been watched very closely to eliminate the possibility of approval of items on which prices were out of line with prices on the American market. Where prices appeared to be excessively high, these prices have been challenged and approval has been held up until reasonable prices have been obtained.

The Pulp and Paper Branch have maintained constant contact with similar staffs in other branches of the government, such as the Department of Domestic Commerce, the Office of International Trade and the State Department. Contact has been maintained with all segments of the U. S. pulp and paper industry and their associations.

An intensive study is being made of all available data regarding the pulp and paper industry of each participating country and possibilities for the future and what effect ECA aid may have in its future development.

Since the war, pulp production in Europe has been retarded by shortages of coal, pulpwood and chemicals. The pulpwood shortage has been directly associated with the lack of coal, by reason both of consequent increase in use of pulpwood for fuel and of the diversion of woods labor to cutting of fuel wood. As coal is made available by use of ECA funds, there will be a resultant increase in the supply of pulpwood for production of pulp.

As a result of the shortages of pulp, much paper machine capacity, especially newsprint, has been idle in European countries. This is particularly deplorable because of the present world shortage of newsprint. Having regard to the disturbing state of the world today, and the urgent importance of the people of Europe being properly and fully informed of all that is going on, it seems highly essential that ECA expend every effort possible toward increasing the available supply of newsprint to the participating countries. The solution does not appear to lie in building of additional new mills but in restoring to production the machines now idle.

Some funds have been authorized for newsprint to cover existing long term contracts which Canadian producers had with consumers in participating countries. In addition, some small tonnages of newsprint have been purchased with ECA funds from other European countries, by participating countries where the need was urgent.

A study of the 1949 tentative program, submitted by each European nations participating in the Marshall Plan, indicates clearly that real efforts will be made to increase pulp and paper production. It is expected that the participating nations will request ECA financing, in increasing amounts, to cover purchase of pulpwood and pulp, rather than finished paper products. As idle production facilities are gradually brought back into operation, the amount of outside assistance can be decreased accordingly.

MR. ATCHISON joined ECA July 7, 1948. Prior to this he worked in West Coast, Southern and Midwest mills, including John Strange Paper Co., Menasha, Wis., where he was technical director.

Article Written Especially For PULP & PAPER

This article has been written especially for PULP & PAPER to explain to its readers how the ECA is operating in Europe, its objectives and its relations toward this industry.

The author, Mr. Atchison, is a 1938 science graduate cum laude of Louisiana State University and obtained master's and doctor's degrees at the Institute of Paper Chemistry, Appleton, Wis. He served 4 years in the Pacific War theater, rising from lieutenant to lieutenant colonel in chemical warfare, on military courts and special missions.

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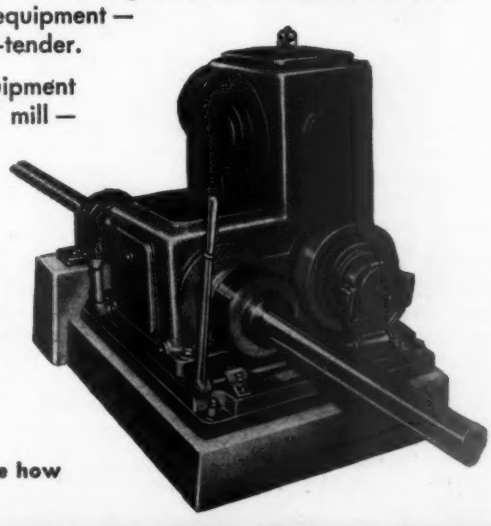
SYCO Saves Half the Space of Other Drives

The modern SYCO Paper Machine Drives save 50%, or more, of the space used by old style drives. The clean, compact, soundly-engineered SYCO Drive unit is self-contained. Just one glance at a SYCO installation reveals usable space available for auxiliary equipment — how safely accessible the paper machine is to the back-tender.

With Modern SYCO Drives, there is no drive equipment below or above the floor-level. You have a "clean" mill — uncluttered with overhead shafts, pulleys, idlers, counter-shafts and belts, guards for belts and gears, superstructure, ladders or catwalks.



Even more important is the better performance of your paper machine with SYCO Drive. The close, accurate speed control is easily adjusted — holds the individual sections in precise speed ratio — preserves uniform tension on the sheet at all times. This means smooth running, fewer interruptions — and increased production.

Write for full information on the SYCO Drives — see how readily they can be applied to your machine.

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Personals

PACIFIC COAST

ZINA A. WISE, himself a 19-year man and Vice Pres. and Gen. Mgr., is pinning service award for 37 years on F. Y. GRIFFITH, Pres. of Griffith Rubber Mills. Between them is Ralph Wieprecht, honored for 25 years, and at left is John Piccolo, who got award for 23 years.

F. T. Griffith and Z. A. Wise Receive Service Pins

Griffith Rubber Mills, Portland, Ore., oldest and largest rubber-roll covering plant in the west, held a service pin presentation program honoring long-service employes and company officials during the holiday season. Franklin T. Griffith, president, was speaker of the occasion, outlining history of the rubber mill from its infancy, almost 40 years ago, to the present expanded operation.

Mr. Griffith received a service pin for 37 years with the company, and Zina A. Wise, vice president and general manager, a pin for 19 years.

J. H. BURRUS, a graduate of Texas A. & M., has been promoted from assistant manager to manager of the Allis-Chalmers Portland, Ore., district, succeeding F. V. Sams, who has retired after serving Allis-Chalmers for 43 years, according to J. L. Singleton, vice president and director of general machinery sales.

DR. KENNETH G. BOOTH has joined Crown Zellerbach Corp. Central Research and Technical Dept. at Camas, Wash., in the fibrous raw materials division. He obtained his doctorate in 1948 at McGill University, worked with Defense Industries Ltd. of Canada during 1940-41 making explosives from cellulose, and was air navigator for R.C.A.F. during the next four years.

OLLIE DUNCAN has joined Crown Zellerbach Corp. at Camas, Wash., as paper mill foreman. He formerly was affiliated with U. S. Gypsum at Los Angeles, Calif. He has had 30 years experience in pulp and paper field, 17 years of which was in the Southern states with Southern Kraft Corp., subsidiary of International Paper Co.

KING WILKIN has been appointed vice president and general manager, Zellerbach Paper Co., San Francisco, and E. A. Breyman has been appointed senior vice president, according to Harold L. Zellerbach, president. Mr. Wilkin began with the Crown Zellerbach organization 12 years ago as director of the training school, and in 1944 became general sales manager. Mr. Breyman becomes senior vice president in title as well as in the number of years that he has served in this capacity.

W. D. McWATERS, 73, former manager of the Portland, Ore., division, Zellerbach Paper Co., died in December at Palm Springs, Calif. He had been with the company since 1906, and at his retirement in 1944, was succeeded by his son, Walter R. McWaters, as Portland manager.

FRANK N. YOUNGMAN, vice president, Crown Zellerbach Corp., Portland, Ore., has just been elected state director for Oregon of the National Association of Manufacturers.

PHIL LUCH, assistant office manager of Crown Zellerbach Corp., Camas, Wash., has been transferred to work on special assignment out of the headquarters San Francisco office. *A. C. CATTO,* formerly of the Portland, Ore., office, has been transferred to Camas as assistant office manager.

LOUIS HALL, beater foreman, ending almost 25 years of service, and *ARCHIE DOUGLAS,* veteran Miehle pressman, have retired as of Jan. 1 at Stockton, Calif., division of Fibreboard Products, Inc.

JAMES ORGENEAL has been appointed chief consulting engineer for Pacific Paperboard Co., Longview, Wash., replacing W. J. Mandley who has gone to the Long-Bell Lumber Co., Weed, Calif.

W. W. HARMON, who has been corrugator operator at the Stockton, Calif., division of Fibreboard Products, Inc., has been promoted to container shift foreman. He is a native of Long Beach, Calif.

LENNART LUNDBERG, son of Halvar Lundberg, veteran consulting engineer in the Pacific Northwest pulp industry, is assistant cook in the new kraft mill built by Weyerhaeuser Timber Co. in Longview, Wash. But the proverb "like father, like son," isn't exactly working out here, as the father is best known as an authority on sulfite pulping, while Lennart's choice is the fast-growing and newer kraft industry.

D. E. McELROY, mill representative of Lukens Steel in California, is moving his residence from San Francisco to Los Angeles.

CHARLES STEHMAN, master mechanic, Soundview Pulp Co., was married recently to Lillian Hausladen, of Everett, Wash.

KING WILKIN (left), recently promoted to Vice President and General Manager of Zellerbach Paper Co., according to Harold Zellerbach, President. Mr. Wilkin joined Zellerbach twelve years ago as head of the training department. He is also member of the Board of Directors. He is a graduate of the University of California.

SAM A. SALMONSON (right), appointed Pacific Coast representative for Chemipulp Process Inc., Watertown, N. Y., and Chemipulp Process Ltd., Montreal. He was for twelve years at Soundview Pulp Co., Everett, Wash., as Asst. General Supt. His present address is Gralyn Court Apts., Lincoln Beach, Ore.

HARLAND R. CLODFELTER, whose appointment as Chief Chemist at Spaulding Pulp & Paper Co., Newberg, Ore., was announced here last month. He was at West Linn, Ore., Crown Z mill.

Damon to Represent Orr

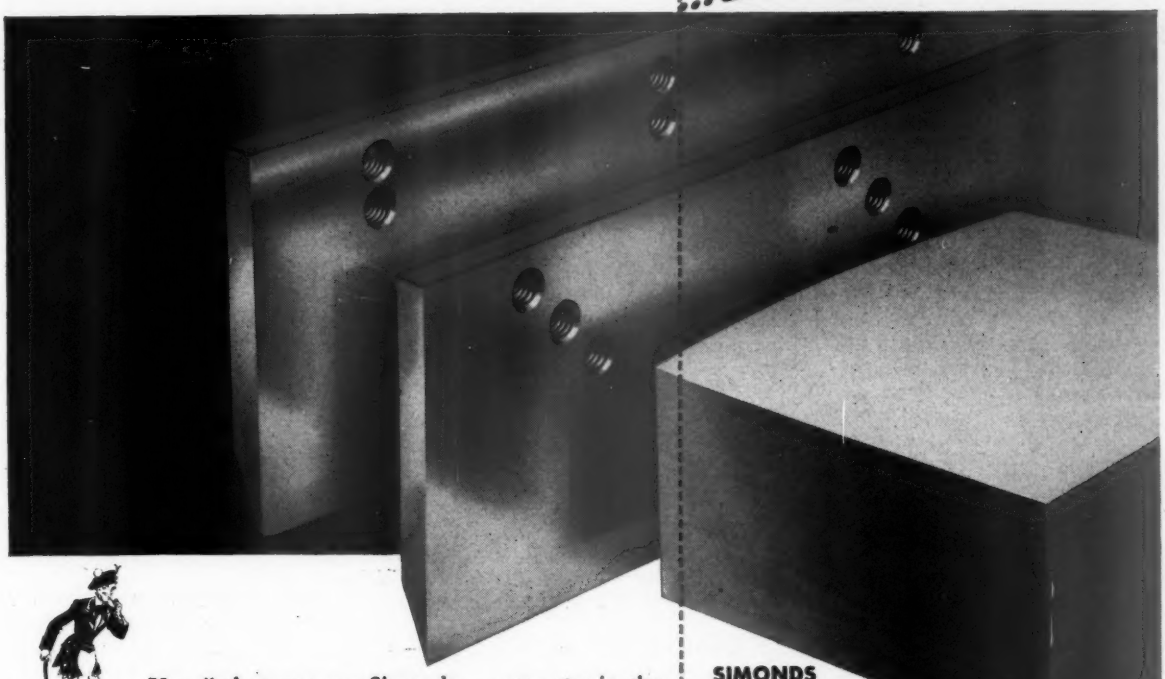
William E. Damon has been appointed the Pacific Coast Representative for Orr Felt & Blanket Co., according to Norman Scott, sales manager. Mr. Damon will handle Orr felts exclusively. His home address is 525 N.W. Tenth Street, Camas, Wash., and he previously has been in the Crown Zellerbach organization.

KENNETH "O. K." CHAPMAN, technical director of Weyerhaeuser Timber Co.'s Everett, Wash., pulp mill, and Mrs. Chapman are receiving congratulations on the birth of their first son, David Danforth, the little fellow arriving in late November. David is preceeded by two sisters, Kathleen and Alice.

LEON DUPUIS, former general superintendent at Crown Zellerbach's Port Angeles, Wash., mill and member of the well-known Dupuis papermakers' family of Quebec and the Pacific Coast, is living in an apartment in Seattle with Mrs. Dupuis. They sold their home on Green Lake some time ago.

JOE E. McQUAID, manager of Seattle office of Electric Steel Foundry Co., met an emergency recently by loading a 500 lb. casting in back of his car, driving it to Esco's Portland, Ore., foundry and then back to a customer after it was rehabilitated—all in one day.

Simonds Cuts RIGHT "ON THE LINE ...EVERY TIME



Yes, "when you use Simonds . . . you *stay* in the Highlands of *consistent* cutting efficiency." No face-drag or feather-edge in cutting. No peaks and valleys in output. Every cut with a Simonds Paper Knife is clean and sharp . . . and you get far more cuts between grindings.

Simonds special S-301 Steel has unmatched toughness and edge-holding qualities. And Simonds special manufacturing methods guarantee correct hardness and temper, uniform taper, and just the right job of concave-grinding for proper face clearance. Let Simonds keep *your* knife costs right "on the line". Order S-301 Paper Knives *today*.

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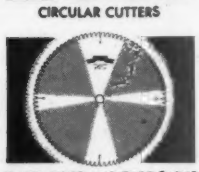

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Personals

NORTHEAST

REX W. HOVEY (at left) has been elected executive vice president of Oxford Paper Co., 230 Park Avenue, New York. He formerly carried the title of vice president. *HAROLD H. HOLDEN* has been named vice president in charge of sales, and *DONALD APPLETON,* vice president in charge of manufacturing.

John H. Draper Passes

John Howard Draper of Canton, Mass., vice president of Draper Brothers Co., died Dec. 17 in West Palm Beach, Fla., aged 65.

He was a native of Canton and had been associated with Draper Brothers for past 45 years.

Survivors include his widow, two sons, John H. Jr. of Canton, and Charles of Cornish, Me.; two married daughters, 11 grandchildren, and three brothers, James B., Joseph P. and Paul A Draper, all of Canton.

SAMUEL L. BROWN, traffic consultant and midwest packaging engineer of Sherman Paper Products Corp., Massachusetts, died suddenly recently at the age of 46.

LYMAN A. BEEMAN, who resigned as chief of manufacturing in the Printing, Publication and Converting Paper Div., St. Regis Paper Co., was elected president of Finch, Pruyn & Co., Glens Falls, N. Y., Jan. 10. Maurice Hoopes, former president, became chairman. Harold F. Zulland was elected vice president and secretary; Samuel Pruyn was re-elected vice president and George F. Hoy was re-elected treasurer.

DR. JOHN VAN NOSTRAND DORR, chemical, metallurgical and industrial engineer, prolific inventor and founder of The Dorr Company and associated companies in Europe, has become chairman of its board and continues as chairman of Dorr-Oliver, Ltd., London. Elmer R. Ramsey, with the company 34 years, several years as operating vice president, succeeds Dr. Dorr as president.

CHARLES A. GRONDONA is now mill manager of the Peter J. Schweitzer Inc., 3-machine cigaret, condenser paper and air mail paper mill at Elizabeth, New Jersey. He was formerly mill manager at the Crown Zellerbach mill in Carthage, N. J., and later assistant resident manager at its big Camas, Wash. mill.

L. G. DURANT is newly elected vice president in charge of sales, engineering and research for Paper and Industrial Appliances, Inc.

Westinghouse Names Fink Manager of Industry Engineering

Appointment of J. C. Fink as manager of the industry engineering department of the Westinghouse Electric Corp. is announced by A. C. Monteith, vice president in charge of engineering. Mr. Fink has been manager of the general mill section of that department with direction of engineers engaged in the application of equipment to pulp and paper and other industries. He is a 1927 graduate of Penn State.

RALPH G. LUFF, president of the D. L. Ward Co., Philadelphia, host to 150 employes and guests of that firm, Paper & Corrugated Specialists Co. and Template Reproduction Co., recently, called attention to the fact that 20% of employes have been in company service 25 years.

WILLIAM GREELEY and *RODERICK T. CLARKE,* treasurer and secretary, of the company, respectively, have been elected to the board of directors of F. C. Huyck & Sons. Mr. Greeley was formerly sales manager for papermakers' felts in New England and middle Atlantic states.

E. F. (BUD) MILES, former president of the Salesmen's Ass'n., has resigned as New York sales manager of Crocker-McElwain Co., Holyoke, Mass., to become New England representative of Missisquoi Corp., Sheldon Springs, Vt.

LOGAN G. HILL has been promoted to eastern sales manager of the Multiwall Bag Division of St. Regis Paper Co., New York. He is a graduate of Yale.

JAMES DIXON has been appointed manager of the dyestuff department, Calco Chemical Division, at the company's Philadelphia branch.

HERMAN JOACHIM, formerly of Los Angeles and later with the Gibraltar mill in New Jersey, is consultant for Empire Box Corp., which has added a coating system, boiler house, and other improvements at Stroudsburg, Pa.

T. L. B. LYSTER, chief engineer of the Hooker Electrochemical Co., Niagara Falls, N. Y., has retired but will continue service to the company as consulting engineer.

E. K. NEWTON, who has been with Hooker as an engineer since 1910, has been appointed chief engineer.

PAPER & INDUSTRIAL APPLIANCES, New York, N. Y., announce their recent appointment as executive sales agents in the U. S. and Canada, for Evans' Rotabelt Suction Units.

WHITE BLACKBOARDS for modern schoolrooms are made of plastic coated fiberboard with the coating sprayed and baked on the lightweight fiber base to provide a smooth surface resistant to light and water. A special crayon eliminates chalk dust and erases easily.

IN INDUSTRY NEWS—

WARD HARRISON (left), newly appointed Manager of Production at Riegel Paper Corp. He will be responsible for manufacturing operations at all four Riegel mills; he will also continue in charge of timberlands near Acme, N. C. Mr. Harrison was with Riegel from 1936 to 1941 in development work; from then until 1948 he was at Ecusta Paper Corp., Pisgah Forest, N. C. Prior to that he was at Camas, Wash., mill of Crown Zellerbach Corp. He returned to Riegel as assistant to Walker Hamilton, Executive Vice President.

PAUL ANTHONY (right), new Manager of Marathon Corp.'s Eastern sales region. He succeeds R. A. Nash who has gone to Sorg Paper Co., Middletown, O., as Vice President of sales. Mr. Anthony has been in several departments at Marathon since joining them in 1924. During the war he handled contracts with Quartermaster Corps in New York City and other government agencies.

ROBERT H. EVANS was recently elected secretary of Riegel Paper Corp. He was formerly assistant secretary and assistant treasurer. During the war he served as assistant chief of the War Production Board.

MR. WALTER GRAESBECK, president of the Finnish Cellulose Association, was a visitor in the United States recently as a representative of the Finnish government attending meetings of the International Bank.

MISS YVONNE MOTLEY'S parents, Mr. and Mrs. Arthur H. Motley of Larchmont, N. Y., have announced engagement of their daughter to *THOMAS BAYARD McCABE, JR.,* son of the president of Scott Paper Co. Mr. McCabe, a graduate of Deerfield and a senior at Swarthmore, served in the merchant marine and the Navy in World War II. Miss Motley's father is president of Parade Publication, Inc.

RICHARD C. DOANE, formerly vice president and general manager of Canadian International Paper Co., Montreal, has been elected vice president in charge of sales, International Paper Co., according to announcement by President John H. Hinman. Mr. Doane joined IP in 1924 as a member of the sales department. He moved to Montreal in 1938.

INTERNATIONAL PAPER CO. has discontinued the office of chairman of the corporation. This office has been vacant since the death of R. J. Cullen Nov. 13, 1948.

BEFORE AND AFTER—AT TONAWANDA, N. Y., MILL

The above "Before and After" photographs were taken at Tonawanda Boxboards division of Robert Gair Co., Inc., Tonawanda, N. Y. They show (left) the paper machine with the flat belt and mortise gear drive which is typical of many mills in New York State and New England—and (at right) the same machine as it is today, operating with Syco mechanical paper machine drives. While the drive is new to many, it has been under development for the past 15 years and the first complete discussion of it appeared in the March 1948 PULP & PAPER in connection with Newton Falls Paper Mill, Newton Falls, New York. Speed control of Syco drives is actuated manually, and may also be operated by push button from the tending aisle side. Machine operation may be speeded materially because of precise synchronization between various sections. Savings in floor space and elimination of safety hazards are well shown in the Gair photographs above. Tonawanda Boxboards has one 110-inch cylinder machine and one 132-inch, widest trim 96 to 120 inches. It produces 470,000 pounds annually.

Sulfite Liquor Evaporation

Price Brothers & Co., of Quebec, is engaged in investigations in connection with the evaporation of sulfite mill effluent, but G. F. Layne, vice president and general manager, states that these are at present not sufficiently advanced to warrant detailed description.

Patents in connection with this work have been issued to Laurence R. Beath and Harold S. Hill, the company's director of research. Electrical heating is said to be involved in the newly developed process.

Previous concentration methods have depended on simple evaporation by heating. This quickly lines the evaporating vessels with a crust of calcium salts that reduces the efficiency of the operation and is also hard to remove.

To avert this difficulty, the liquor is heated by passing a strong current of electricity through it as it flows through a closed chamber to prevent boiling. From there it passes into another chamber, where the pressure is lower, permitting vapors to come out. Among these vapors is sulfur dioxide, which can be immediately re-used in pulp manufacture.

Progress At Prince Rupert

Clearing of the mill site for the Columbia Cellulose Co. (Celanese Corp. of America) pulp mill near Prince Rupert, B. C., has been completed and it is now ready for construction of the buildings. Construction will keep step with the equipment deliveries.

Contracts have been let and purchase orders issued for practically all of the major pulp mill equipment items, according to Harold Blancke, president of Celanese Corp. Logging plans have been formulated and some orders for logging equipment placed.

Canadian Sumner Iron Works, Vancouver, B. C., has received the contract for supplying a six-knife 153-inch chipper and a Bellingham (Puget Sound Pulp & Timber Co.) type whole log barker to handle logs up to 26 feet.

The Montreal firm of consulting engineers, Surveyers, Nenniger & Thenevert, is designing the wood room, and E. Nenniger visited the west coast during January to familiarize himself with conditions at the site.

Dominion Construction Co. of Vancouver and Montreal will construct the power house.

"Lefty" Smith Joins Gould

LESTER J. SMITH has been appointed Plant Manager in charge of mill operations of the Gould Paper Co., Lyons Falls, N. Y., according to R. W. SHAVER, Vice President and General Manager of this division of Continental Can Co. Mr. Smith had been filling the post of Paper Mill Superintendent for several months and his appointment was made effective Jan. 13. In February he moved his family from the Middle West to Lyons Falls. Mr. Smith, known as "Lefty" to many in the industry, is member of a famous papermakers' family. He was formerly at Combined Locks, Wis., and at St. Regis, in Kalamazoo. His father, Paul, is consultant to Blandin Paper Co.

Personals

MIDDLE WEST

Kimberly-Clark Honors Life Members At Kimberly

At a recent dinner honoring "life members" from the Atlas and Kimberly, Wis., mills of Kimberly-Clark Corp., it was brought out that more than 200 pensioners are now on the retirement list—94 from those two mills.

President Cola Parker, Vice President Henry G. Boon and other officers spoke. Cliff Williams, mill manager at Atlas, and J. T. Doerfler, manager at the Kimberly mill, welcomed guests and introduced some of the old timers.

William Kranzuch, 88, who retired at the Atlas mill 11 years ago, was the oldest member, and John Hanson, 84, was next.

Neenah Mills Entertain

Neenah Paper Co. and Bergstrom Paper Co., both of Neenah, Wis., joined together in sponsoring a recent holiday's party for children of employes of both mills.

HOWARD R. LARSON, on the rolls of Neenah Paper Co., Neenah, Wis., for 47 years, is oldest employe of that company in point of service. Joe Beisenstein, with 44; Ernest Weinke with 42; Walter Handler and George and William Redlin, with 41, and President D. K. Brown, Charles Handler, Harvey Larson, Albert Olson and Fred Zoelk, with 40, are next in that order. There are 105 employees now in the Old Timers Club (20 years or more).

COLA G. PARKER, president, Kimberly-Clark Corp., Neenah, Wis., was re-elected director for the state of Wisconsin by the National Association of Manufacturers.

DR. OTTO KRESS, retired technical director and founder of the Institute of Paper Chemistry, in Appleton, Wis., is now living in Florida. His address is Box 663, Naples, Fla.

W. J. BLACKLEY, executive vice president in charge of sales of Beveridge Paper Co., Indianapolis, is taking a trip through the Southwest, Far West and Hawaiian Islands.

C. H. ANDERSON of Pennsalt's Chicago office, has been placed in charge as district sales manager of a new Pennsylvania Salt Manufacturing Company office in Appleton, Wis.

MRS. GRACE GOLDEN AND MRS. FLORENCE DITTER are most recent new members of Thilmany Pulp & Paper Co.'s Quarter Century Club. Mrs. Golden is cashier and assistant bookkeeper; Mrs. Ditter is a supervisor in purchasing. Two other women employes in the Club, are *MISS MARY WARD* with a 30-year record, floorlady in finishing dept. and *MISS ALMA MILZ* in the ordering and planning dept.

NORMAN SEEGERT, research laboratory, M & O Paper Co., International Falls, Minn., got his deer this past season with bow and arrow. Another experience —a ducking when his boat swamped but he landed safely.

WILLIAM BECKETT, executive vice president of Beckett Paper Co., wouldn't be allowed to retire from public life in Hamilton, O., by voters of that city. He is now a councilman after having been one of the city's best and hardest working mayors.

AT 14TH ANNUAL PAPER MAKERS GET-TOGETHER, Michigan Superintendents Division and Kalamazoo Valley Technical Section members met in mid-January in Kalamazoo. M. J. Schulenburg, Special Assistant to the President, Kimberly-Clark Corp., read the address prepared by Cola G. Parker, Kimberly-Clark President, for the event. Mr. Parker was not able to be present.

Among those attending were (Left to Right): Top row, WILLIAM RACE, President, Sutherland Paper Co., who was Master of Ceremonies; MR. SCHULENBURG; HERBERT JOHNSON, Allied Paper Mills, Chairman of Michigan Div., Supts.; PAUL W. BARTHOLOMEW, Hawthorne Paper Co.. Chairman, Kalamazoo Valley Technical Section.

Second row, RALPH W. HAYWARD, President, Kalamazoo Vegetable Parchment Co.; JACK HAYWARD, K.V.P.; ROBERT B. WOLF, of New Canaan, Conn., former Manager of Pulp Div., Weyerhaeuser Timber Co.

Third row, L. W. DICKINSON, Mgr. and Purch. Agent, Mac Sim Bar Paper Co., Otsego, Mich.; CLEM SISSON, MacSimBar; M. D. BARDEEN, President, Lee Paper Co., Vicksburg, Mich.; L. R. VERDON, Manager, American Cyanamid Co., Kalamazoo Div.

Bottom row, GEORGE H. GERPHEIDE, President and General Mgr., Hawthorne Paper Co.; ANDY ALDRICH, Kalamazoo Vegetable Parchment; G. N. CARLETON, Vice President, Detroit Sulphite Pulp & Paper Co.

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Personals

CANADA

OSCAR G. SMITH was recently appointed Purchasing Agent for Powell River Co., Vancouver, B. C., succeeding the late R. A. Baker.

New Appointments For Powell River Co.

The following promotions have been announced for Powell River Co. by Resident Manager Russell M. Cooper. Don MacLaurin has been appointed technical director, stepping up from control superintendency. He joined Powell River in 1946 after eight years with Kimberly-Clark Corp. and four with B. C. Pulp & Paper Co.

Ron Stewart, until recently project engineer, has been named assistant plant engineer. He joined the company as a junior draftsman in 1940. Alex Van Allen, a member of the technical staff for the past eight years and lately acting technical assistant to the sulfite department has been appointed assistant sulfite superintendent. Dr. Ralph Patterson has been named superintendent of research and development, and Sid Collicutt, superintendent of technical services. Dr. Patterson formerly was at McGill University, Montreal, and the Ontario Paper Co.

VERNON E. JOHNSON, for several years vice-president of Canadian International Paper Co. in charge of woodlands, has been appointed general manager of the company, succeeding *R. C. DOANE,* according to announcement by President S. L. de Carteret, C.M.G. Johnson joined C.I.P. in 1929 as assistant manager of woodlands, became manager of the department in 1935 and a director and vice-president in April, 1946.

SVEN QUIST and *SHERWOOD D. FORD* have joined the staff of Beecher & Sandwell, consulting engineers, in Vancouver, B. C. Mr. Quist, Danish-born electrical engineer, was with the late John Stadler as process control design engineer for Lake Sulfite Co. and for several years was manager of Mason Regulator Co. of Canada and latterly project engineer for Powell River Co. Mr. Ford was until recently with Powell River Co. in structural design and process planning and previously tool design supervisor for Boeing Aircraft of Canada.

A. F. (Bert) PRICHARD and *MEL JULSON* have been appointed assistant electrical superintendents for Powell River Co. under E. G. Craigen.

H. J. BURNS, Manager of the Vancouver, B. C., office (left) and R. PARADIS, Resident Manager at Port Mellon, B. C., are heading up the Sorg Pulp Co. organization in British Columbia since the recent death of Vice-President and General Manager Hugh Lewis.

Hugh Lewis of Sorg Dies At Age of 57

Hugh M. Lewis, vice president and general manager of Sorg Pulp Co., Vancouver, B. C., with mills at Port Mellon, B. C., died following a heart attack at his Vancouver home Dec. 28, aged 57.

One of the most active and popular members of the pulp and paper fraternity in Western Canada, Mr. Lewis first went to British Columbia in 1910 as railway engineer. He was overseas in the Canadian army five years during World War I.

He joined Provincial Paper Co., Port Arthur, Ont., in 1929 and later Pacific Mills at Ocean Falls. During World War II he was general manager of Burrard Dry Dock, Ltd., Vancouver builders of steel cargo ships. In 1944 he joined Sorg, to head up operations in British Columbia and direct modernization of Sorg Pulp Co. and make it an efficient subsidiary of Sorg Paper Co. in Middletown, O.

NEVILLE BEATON, recently manager of Brompton's Red Rock, Ont., kraft mill, and also with Marathon in Canada, has joined the staff of Howard A. Simons, designing plans for the Nanaimo Sulfate Pulp Co. mill to be built on Northumberland Channel near Nanaimo, Vancouver Island. Mr. Beaton was formerly resident engineer at Powell River.

VICTOR J. SUTTON, assistant mill manager, Bowaters' Newfoundland Mills, is serving his third year as president of the Corner Brook, Nfd., Community Concert Association which he organized. Mr. Sutton saw where other remote mill towns got together and brought famous concert artists to their towns. He got the two mills in Newfoundland to team up successfully with the same kind of program.

JAN UNANDEV-SCHAVIN, son of *ARNE UNANDEV-SCHAVIN,* who is general manager of the Bowater's mill in Sweden, is learning about all phases of the industry at the big Bowater's mill in Newfoundland. Presently he is in the groundwood department, under the experienced guidance of the veteran groundwood superintendent, *JIM MOYNIHAN.* His father's post is at Bowater's Svenska Tramassefabrikev, Umea, Sweden.

H. J. BURNS, treasurer, and *R. PARADIS,* resident manager, Sorg Pulp Co., have been appointed to the executive committee of the western branch, Canadian Pulp and Paper Association, succeeding the late Hugh M. Lewis.

ARCHIE WELCH, formerly general manager of Sidney Roofing & Paper Co., Victoria, B. C., has arrived in Ottawa, taking over new duties as general manager of the E. B. Eddy Co. Both companies are controlled by Garfield Weston, who is chairman of the board. Mr. Welch continues as a director of the Sidney company.

J. A. CRAIG, formerly secretary-treasurer of Sidney Roofing & Paper Co., Victoria, B. C., has been appointed general manager of both the Sidney organization and its subsidiary, National Paper Box, Ltd., of Vancouver. *H. E. BROWN* has been promoted to secretary-treasurer of both firms.

J. A. MACARTHUR, project engineer for the Montreal consulting engineering firm of Stadler, Hurter & Co., has flown to Pakistan to make a survey for the proposed new government paper mill in East Bengal.

COLONEL C. H. L. JONES, who retired recently as president of Price Brothers & Co., Quebec, has been named vice president of the Empire Arts Council. He retains his directorship with Price Brothers and presidency of Mersey Paper Co.

CHARLES S. EVANS, formerly with the Crown Zellerbach Corp. at Port Angeles and Camas, Wash., is associated with Howard Simons, consulting engineer in Vancouver, B. C., working on plans for the Nanaimo, B. C., kraft pulp mill.

JACK FEAR, manager of St. John Sulfite Pulp & Paper Co., at St. John, New Brunswick, is heading up an important program of expansion and modernization of that mill.

J. H. SEYMOUR has been transferred from the engineering department of Abitibi Power & Paper Co. at Sturgeon Falls to Port Arthur, Ont. (Thunder Bay Paper Co.).

GRANT ROSS, mill manager of Marathon Paper Mills of Canada, makes a hobby of collecting agates and other unusual stones, and he has found another stone collector in *FRED SOUGHTON,* public relations and employe services supervisor at LongLac Pulp and Paper Co., 50 miles west of Marathon. They get together for stone hunts on Lake Superior beaches.

DAVE CURRIE, groundwood superintendent, Fort Frances, Ont., mill of Ontario & Minnesota Paper Co., got a sharp-tailed grouse right on the mill property. It decapitated itself on an overhead and fell at his feet in front of No. 3 grinder room.

ALLAN WILSON has been appointed assistant store manager at Ocean Falls, B. C., for Pacific Mills, Ltd.

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You can't have a better second for the scuffle than a Moore & White sales-engineer. Back of him are the augmented engineering and production resources of an old, reputable house. Before you is a burgeoning balance sheet most satisfactory to behold, if you avail yourself of his counsel.

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"Forests comprise a crop which can be made to provide a countless number of jobs and a degree of prosperity never before known in the South." —The Southern Association of Science and Industry.

SOUTH WOOD HANDLING SHOW

Camp Mfg. Co. Methods Demonstrated

The loading and unloading of pulpwood was the big and important subject "yarded and trucked" by members of the Southern Technical Committee of the American Pulpwood Association at their last 1948 meeting at Camp Manufacturing Co. pulp and paper mill at Franklin, Va. Twenty-six were in attendance, representing 11 mills and nine builders of equipment pertinent to the subject of the meeting.

Chairman of the Southern group is J. E. McCaffrey, International Paper Co., and on his committee are J. M. Camp, Jr., Camp Manufacturing Co.; L. A. Whittle, Brunswick Pulp and Paper Co.; T. N. Busch, International Paper Co.; K. S. Trowbridge, North Carolina Pulp Co.; G. C. Shoptaw, Union Bag & Paper Co.; G. A. Harrison, Johns-Manville; C. H. Niederhof, West Virginia Pulp & Paper Co.; C. Y. Townley, Champion Paper & Fibre Co.; G. H. Wesley, National Container Corp.; and J. H. Keener, Champion. All but four were present in addition to H. E. Brinckerhoff and H. H. Jefferson of the Pulpwood Association; J. B. John-

MEN ATTENDING FRANKLIN, VA., PULPWOOD SHOW: Seated (left to right): L. A. WHITTLE, Brunswick Pulp & Paper Co., Brunswick, Ga.; G. L. HAYES, Halifax Paper Co., Roanoke Rapids, Va.; A. L. WENRICH, Continental Can, Hopewell, Va.; T. N. BUSCH, International Paper, Georgetown, S. C.

Front row standing (left to right): J. B. JOHNSON, Camp Mfg. Co., Franklin; K. S. TROWBRIDGE, North Carolina Pulp Co.; H. E. BRINKERHOFF, Secretary, American Pulpwood Ass'n, New York; ORD ISHER, Thew Shovel Co.

Back row standing (left to right): N. T. BARRON, Camp Mfg. Co., almost obscured; G. D. HARRISON, John-Manville, Jarrett, Va.; J. E. McCAFREY, International Paper, Georgetown; W. B. TURNER, Camp Mfg.; E. V. ACH, North Carolina Pulp Co.; W. C. COLEMAN, Bemis Equipment Corp.; H. H. JEFFERSON, American Pulpwood Ass'n; n. t. poarch, Camp Mfg.

20-MILE ERRAND... TWICE A DAY

How's THIS for a pay load? It's 200 tons of pulpwood in all, hauled on twenty-four sleighs by one sure-footed "Caterpillar" Diesel D7 Tractor. Working in sub-zero temperatures, this sturdy D7 makes two round trips per ten-hour day on a ten-mile haul from bush cutting point to dump on Abitibi Lake, north of Mace, Ontario, Canada.

Working with it on this operation are fifteen other pieces of "Caterpillar" Diesel equipment, chosen for their dependability and money-making efficiency by the Abitibi Power & Paper Co., Iroquois Falls, Ontario. The "Caterpillar" line-up includes five D7s . . . three D6s . . . four D2s . . . three D4400 Engines . . . and one No. 12 Motor Grader.

" 'Caterpillar' Diesel Tractors have far more durability and ruggedness than any other make," Supt. M. J. Hennessy states. "The speed with which these machines return for our loads is a whale of an advantage when it comes to putting out the work."

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DIESEL ENGINES TRACTORS MOTOR GRADERS EARTHMOVING EQUIPMENT

EQUIPMENT AT PULPWOOD SHOW: 1. Truck drives over wooden truck mats used to negotiate muddy roads. Mats are 30 inches wide; crossboards, rough one-inch lumber, 8 to 10 inches wide and 30 inches long. 2. Close-up of mats. Cost of mat road: about $5,000 per mile for labor and materials, plus $1,000 for laying. 3. Swing boom log loader at Camp Mfg. Co. operations near Franklin, Va., has gravity swing and is designed and built by Camp engineers and machinists. 4. Allis-Chalmers tractor and Pacific Car & Foundry Co. (Renton, Wash.) winch, with Camp-built arch bringing in pulpwood logs over fairly difficult terrain.

son, W. B. Turner, N. T. Poarch, L. B. Holland, and N. T. Barron, all of Camp; R. Smith Ward, Union Bag; G. L. Hayes, Halifax Paper Co.; L. V. Ach, North Carolina Pulp; A. L. Wenrich, Continental Can; A. E. Decker, Allis-Chalmers; W. C. Coleman, A. D. Willis, Jr., Bemis Equipment Corp.; J. T. Thompson, Wellman Engineering Co.; C. G. Heslet, Acme Steel; William Spencer, Virginia Tractor Co.; W. R. Hunt, Hyster Co.; and Ford Fisher, Thew Shovel Co.

Camp Methods Are Discussed

Chairman McCaffrey opened the discussion in the conference room of the Camp mill by introducing Mr. Turner of that company to present his study of loading and unloading as done at Camp. Mr. Turner said "60% of our pulpwood is cut in log lengths, 30% in the five-foot length, and 10% from sawmill slabs barked in the long log barker. This barker is patterned after machines used in Europe and Canada and is the first of this type erected in the U. S. It rolls the logs against each other in a manner that clears them of bark and leaves the slabs suitable for chipping.

"Since the war," said Mr. Turner, "we have not been forced to experiment extensively in the loading of 5 ft. wood. Loading is still all done by hand. We are, however, much concerned with the loading of pulp logs of the log length that are produced in the same operations that supply our sawmill with sawlogs. Specification of pulp logs brings in some unsightly pieces that occasionally clog the lines of production."

Mr. Turner related the history of sawlogs at Franklin and went on to say, "the first stationary rigs with the extended logs used in truck logging had the platform about six feet off the ground and a twenty foot boom rising at an angle of thirty degrees. With this far extension from the point of pivot, the swing was very slow and loading was slowed down. The new machine on the lower truck frame has the boom rising at a 50 to 55 degree angle in order to afford the necessary clearance for loading. This arrangement causes a much faster swing of the boom.

"In order to move the first conversions, a truck would back under it and the extended legs would be raised. The new models were mounted on outdated heavy trucks but these have always been tuned up to tip-top running condition before delivery to the job. Lately it has been decided that it was unnecessary to use a truck in running order for this mount, but that any truck frame in rolling condition with sufficient weight forward to balance the boom when loaded would do; perhaps a heavy tool shed from which the rig could be steered while in motion would fit this forward position."

Mr. Turner pointed out that observers

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of the log loaders—and almost all operations in the Franklin area had been furnished with one mounted on a truck frame — would find certain objections. The boom swing is slow, and there is a good deal of dropping because tongs and hooks do not readily stick in small material. Also, no practical means have been found by which groups of logs can be loaded at a single load. Only way such a machine could fit into the production of five-foot wood, said Mr. Turner, would be as a skidder and loader of packaged wood.

He called attention to a loading rig, made by Clyde Iron Works of Duluth, in service in the Camp yard. This loads log length pulpwood on rail cars and is a jump back loader, a sliding jammer which has a stationary A-type boom, gasoline engine, and double drum assembly made by Stroudsburg Engine Co.

Mr. Turner said that three loading rigs loading pulpwood for the Franklin mill consists of wooden gravity-swing booms fastened to trees and is powered from the rear axle of incapacitated trucks. They handle about 13 cords per eight hour day. "One of our contractors," said Mr. Turner, "has a Loggers Dream skidder-loader as a loader, but the operator must be very watchful to avoid smashing truck cabs. We are also loading pulp logs on two operations on a line stung through an overhead block fastened on a tree. The lines are powered from skidder drums, and here again trucks are sometimes endangered.

The necessity for developing equipment which will take the back-breaking work out of wood production, even though only 10 or 20% must be handled by hand, was stressed. It was pointed out that with the continually increasing prices of wood in the South, the necessity for such equipment seems to be indicated. In order to draw year-round labor into pulpwood production, mechanical equipment is essential, it was said.

Advantages and disadvantages or short and long logs were discussed, and the group arrived at the conclusion that log lengths must be determined by economics of each individual operation. It was felt that small producers, who supply a large portion of wood to Southern mills, must have less costly equipment if they handle log lengths.

Group Sees Yard Operations

After the discussion the group adjourned to the yard to see the barker and crane operations. After luncheon the session heard Mr. Turner on "Unloading with Transfer Cranes." Pulp logs brought to the Franklin mill yard on trucks are unloaded and the material piled by a Lorain 81, A 1¾-yard Crawler crane of 120 hp. The bucket used is a Blaw Knox No. 12 pulp grapple. This machine unloads a truck carrying approximately 3.75 cords in 3 grabs, requiring about 4 minutes. At the 40 to 45-foot radius of operations which is used with the 60-foot boom, the crane appears loaded, the treads often slightly clearing the ground. The load is 3,700 lbs. of bucket plus approximately 7,000 lbs. of wood. This crane also loads cars for the slasher from the storage pile when it is not unloading trucks.

The Lorain 55, an 80-hp. crane, formerly used at this position, was found too light for the heavy work. The No. 8 Blaw Knox grapple is used almost as heavy as the No. 12 (3,100 lbs.), and requires five grabs to unload the truck.

Five-foot wood received on trucks and railway cars is unloaded and piled by a Northwest Model ME 6, a 1½-yard Crawler with a Murphy diesel engine. The bucket is the Owens Orange Peel, Size 96, weighing approximately 5,600 lbs. This is swung from a 60-foot boom at about 45 feet of radius and will unload a rack car of short wood in 15 to 20 miuntes. This crane feeds the conveyor chain for the mill from the cars, trucks and pile.

At the slasher, where 16-foot pulp logs are cut into three pieces for delivery to the mill conveyor, a Browning No. 5 locomotive is stationed, rolling gear removed and sitting on blocks. This crane lifts pulp logs from the cars or trucks and lays them on the slasher chain.

At the barge landing on the main yard, a Link-Belt No. 2 with a 60-foot extension boom is employed unloading 5-foot wood from lighters onto the conveyor that leads to the mill. A Blaw-Knox grapple is used here on the short wood in order to keep damage to the lighter decks at a minimum.

At the long log barking drum, sawlogs are lifted from cars and trucks onto the deck by a 1929 Link Belt. This machine has Waukeshaw WK-40A gasoline engine. A Model 12 Blaw-Knox grapple on a 50-foot boom is used for picking up the logs and about 80,000 feet are transferred in eight hours.

A motion picture of the Busch sling was shown and this was succeeded by a discussion of loading and unloading operations in various companies represented.

Search for Ideal Equipment

Conclusion: Wood handling is a big problem in pulpwood production, and tremendously important in the cost factor.

Another conclusion: The ideal equipment for unloading rail cars is not yet available. When it comes, the pulpwood men said, it will have to be highly mobile, fast, relatively low cost, and practical. Definite economic advantages were seen in the use of pallets.

Forestry Conference in South

Contribution of the pulp and paper industry to Southern forestry advancement will be the principal theme of the Southern Forestry Conference of 1949 scheduled for Montgomery, Ala., on Feb. 18 and 19. This annual meeting is sponsored by the Forest Farmers Association, general offices in Valdosta, Ga.

James H. Allen, president of the Florida Pulp and Paper Co. and vice president of St. Regis Paper Co. will be principal banquet speaker. Other leaders who will participate include W. M. Oettmeier, general manager of the Suwannee Forest, who is president of the Forest Farmers Association; Julian F. McGowin of W. T. Smith Lumber Co., Chapman, Ala.; Lyle F. Watts, chief of U. S. Forestry Service; C. F. Korstian, dean of Duke School of Forestry, and W. H. Collet, West Virginia Pulp & Paper Co.

B. C. Forest Engineers Meet in March

British Columbia members of the Canadian Society of Forest Engineers will hold a two-day conference at the Hotel Vancouver, Vancouver, B. C., on March 3 and 4.

Theme of the meeting will be technical forestry, and among the speakers will be Ed Heacox of Weyerhaeuser Timber Co.; Philip Bright of the U. S. Forest Service; Charles Cowan, of the Washington State Fire Association; Harold MacWilliams, Ross Douglas, Eustace Smith and Fred Fraser, British Columbia members of the association.

Annual joint dinner meeting of the Puget Sound section, Society of American Foresters, and the British Columbia members of the Canadian Society of Forest Engineers will be held on the evening of March 4, and loggers from all parts of the Pacific Northwest are invited to attend the sessions.

Salvage Logging Report Made At Western Convention

Problems of the forester and the pulpwood logger were dealt with at the annual conference of the Western Forestry and Conservation Association in Victoria, B. C., Dec. 9, 10 and 11, attended by industry representatives and forest officials from several states and provinces.

Subjects were sustained yield management, technical problems, insect infestation in timber, salvage logging and fire protection.

R. J. Filberg, vice president of Comox Logging & Railway Co., chairman of the session, reported on his company's salvage log operation on Vancouver Island. He told how his company had invested $250,000 in this project, working in stands running about 80% fir, of which about 80% is suitable only for pulpwood. Small logs are bundled and trucked to tidewater, and towed to Everett, Wash., for Soundview Pulp Co.

The Canadian company is producing 150 cords daily at a profit.

One of the most contentious issues discussed was British Columbia's forest management license system initiated by legislation in 1947. Dr. C. D. Orchard, deputy minister of lands, said the law encouraged private operation on a long-term basis.

McCulloch Ships Saws to Georgia

The light-weight of the McCulloch saw makes it possible to use air transportation for this shipment without entailing high shipping costs. Reports have reached **PULP & PAPER** that a ton shipment of 30 chain saws is being sent by McCulloch Motors Corp. of Los Angeles, to Georgia from Los Angeles.

YOU GET HUSKY, DEPENDABLE EQUIPMENT

with the new BJ double-duty *Pulp Pump*

NEWEST IN THE LINE OF BJ PUMPS	
Capacities	*400 to 4000 gpm*
Heads	*40 to 200 feet*
Sizes	*3"-4"-5"-6"-8"-10"-12"*
Stock Consistency	*Up to 6%*

TO INSURE CONTINUITY OF OPERATION, SPECIFY A BJ PULP PUMP. The new Byron Jackson *standard* Pulp Pump features dismantling and inspection of bearing bracket, impeller and liners, without (1) disconnecting suction or discharge piping or (2) removing the driver. Specially designed to handle high consistency pulp, This new pump is built for years of trouble-free service. Its large impeller eye keeps entrance velocity low. Flow is smooth and positive. There is no clogging. Constructed with an extra heavy case, oversized shaft, double row radial and thrust bearings, the BJ Pulp Pump handles up to 6 percent stock.

CONVERT TO ACID AND LIQUOR SERVICE, or vice versa. This double-duty Pulp Pump is easily converted from pulp stock service to acid and liquor service merely by changing a few parts. *For hot fluid services,* the standard Pulp Pump stuffingbox can be replaced with a water-jacketed stuffingbox. Where several BJ pumps of different sizes are used, interchangeability of group parts means smaller inventories, less down time and lower replacement parts cost.

OTHER DESIGNS FOR PULP AND PAPER INDUSTRY. The *standard* Pulp Pump is one of many BJ designs for pulp and paper pumping requirements. The BJ *Special-Duty* Pulp Pump, similar in design and construction to the standard line, has larger passages enabling these pumps to handle pulp stock of higher consistency.

BJ Screw Feeder Pumps will feed still higher consistency pulp into the impeller eye. The standard Pulp Pump will handle 5 to 7 percent stock when equipped with the Screw Feeder Pump. The Special-Duty Pump will handle 6 to 8 percent stock when so equipped.

For longer life, increased dependability, and greater flexibility, choose the new BJ Pulp Pump. Our new 12-page booklet on the complete line of centrifugal pumps for the Pulp and Paper Industry, is soon to be available. Write today for your copy... no obligation, of course.

Byron Jackson Co.

Established 1872

LOS ANGELES 54, CALIFORNIA

Offices in Principal Cities

FRANK A. KELLY (left), A.P.A. Vice President and Manager of Land & Timber, and also President of The Northwest Paper Co., Cloquet, Minn.

H. E. BRINCKERHOFF (right), Executive Secretary of the American Pulpwood Association, New York City.

Duluth Meeting of New Pulpwood Organization

Photos by **PULP & PAPER** on these pages were taken at the Lakes States Technical Committee of the American Pulpwood Association meetings at Duluth, Minn. for three days recently. Talks were on the subject: "Evaluation of Pulpwood and Wood."

The subjects presented were "Method of Purchase of Pulpwood by Weight" from Lucien Whittle, Brunswick Pulp & Paper Co., Brunswick, Ga.; "The Scaling of Pulpwood by Electronic Intergrator," by R. D. Salter, Consolidated Water Power & Paper Co., Wisconsin Rapids; and "Cubic Measurement of Pulpwood" delivered by J. B. Martin, Rhinelander Paper Co.

Dr. T. A. Pascoe, technical director for Nekoosa-Edwards Paper Co., presented the Nekoosa-Edwards system of photographic method of scaling; George Brabender, technical director, Marathon Corp., talked on pulpwood measurement, and Cal Stewart, Kimberly-Clark Corp., presented wood evaluation and measurement. Howard Palmquist, woodsland manager at Marathon Corp., presided at the meeting as the 1948 chairman of the group.

PULP & PAPER SNAPPED this picture as J. V. MARTIN (left), of Rhinelander Paper Co., and new Chairman of the Lake States Technical Committee of the American Pulpwood Association, received congratulations from the retiring chairman, H. R. PALMQUIST, of Marathon Corp.

More Chippers in Sawmills

Canadian Western Lumber Co. will install a chipper for production of pulp chips at its Fraser River mills, making 150 units a day with a chipper with flat belt drive.

Bloedel, Stewart & Welch, Ltd., is installing a chipping plant at its new Port Alberni pulp mill. Chipping plants are now in operation at Universal Box Co. and Canadian White Pine Co., both in Vancouver, B. C.

Record at Anglo-Newfoundland

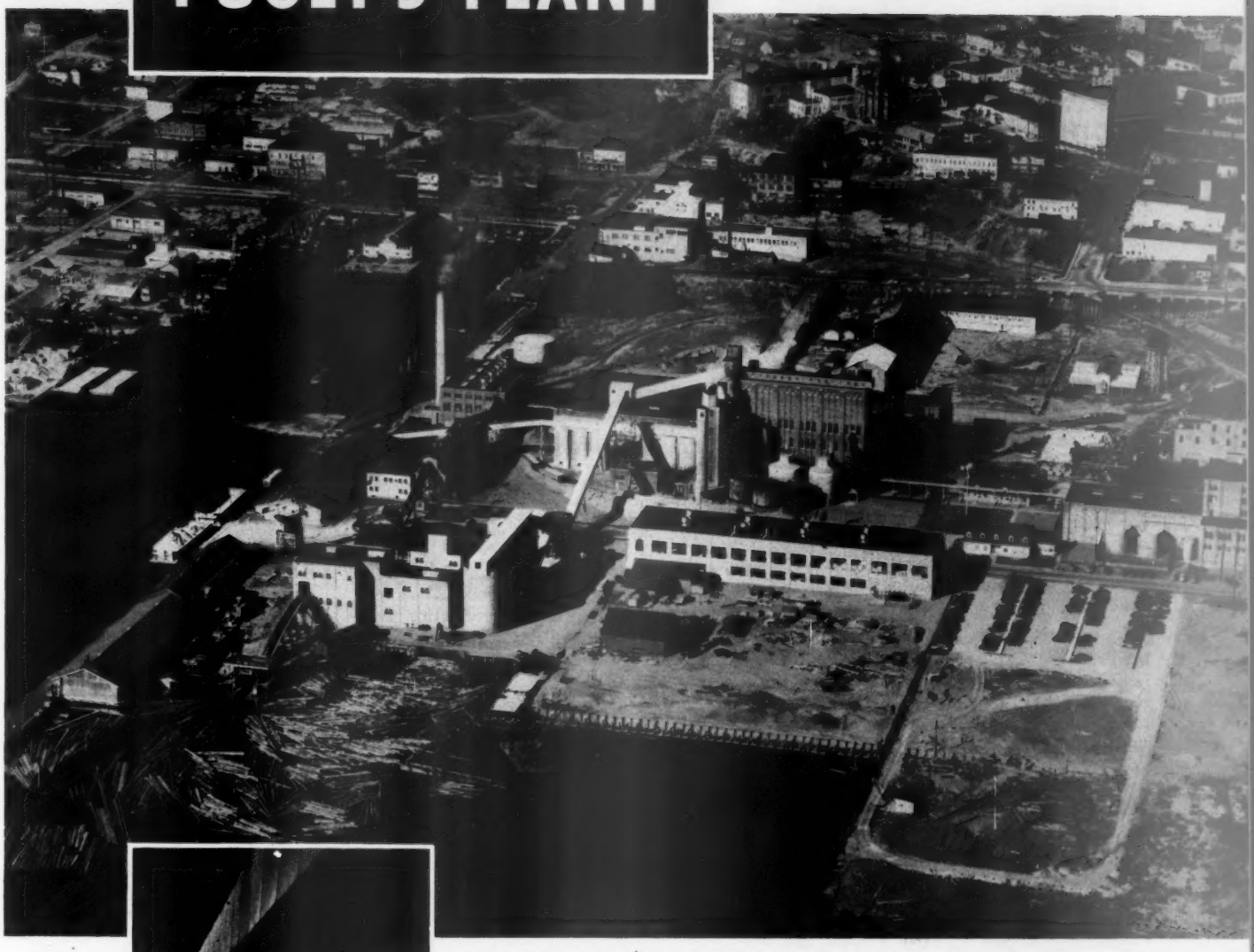
Anglo-Newfoundland Development Co., whose newsprint mill is located at Grand Falls, Newfoundland, established a production record recently when 686 short tons were manufactured in 24 hours.

LIGNASOL is now being shipped in powdered form instead of as liquid in tank cars by Gaspersia Sulfite Co. of Chandler, Quebec. The company installed a spray dryer last fall.

MEMBERS OF LAKE STATES TECHNICAL COMMITTEE of American Pulpwood Association at meeting in Duluth, Minn. Front row (l. to r.), ONNI KOSKI, of Minnesota & Ontario Paper Co., and Vice Chairman of committee; LEO FAY, of The Northwest Paper Co.; BRUCE BUELL, Northern Paper Co.; J. V. MARTIN, Rhinelander Paper Co., and new Chairman; R. D. SALTER, Consolidated Water Power & Paper Co.; C. H. KEEPERS, Nekoosa-Edwards Paper Co.

Back row. R. R. EDGAR, Kimberly-Clark Corp.; W. H. HILDEBRANT, Mead Corp.; H. R. PALMQUIST, retiring chairman, Marathon Corp.; E. J. ANDERSON, Marathon Corp.

THIS IS PUGET'S PLANT



AERIAL VIEW OF THE PUGET SOUND PULP & TIMBER COMPANY'S PLANT IN BELLINGHAM, WASHINGTON. MODERN BUILDINGS ARE GROUPED FOR STREAMLINED PRODUCTION AND READY ACCESS TO THE LOG POND AND ADJOINING DOCKS FOR WATER SHIPMENT.

AMERICA'S LARGEST PRODUCER OF UNBLEACHED SULPHITE PULP

Puget Pulp's modern plant, plus scientific control from forest to shipping dock, insures a uniform product. ✱ Puget Pulp is one of the Nation's most important sources of unbleached sulphite market pulp.

CAPACITY: 125,000 TONS ANNUALLY

PUGET SOUND PULP & TIMBER COMPANY

BELLINGHAM • WASH.

Personals

SOUTH

GEORGE G. ARTHUR has become coordinator of training and development in the general industrial relations office, Hamilton, Ohio, for Champion Paper and Fibre Co. His task is to formulate and develop adequate means and methods to train employes to carry on Champion's operation. While the new duties take him to all divisions, he will maintain his home in Canton, N. C., where he served as supervisor of training.

JOHN E. CAMPBELL, who had been serving as assistant agent of the International Paper Co., Camden, Ark., mill, has been named agent to succeed S. N. McMullen, who retired. Mr. Campbell joined the company in 1928, serving almost 20 years at the Bastrop, La. mill. He was assistant mill agent at Bastrop when he was transferred to Camden in 1948.

A. D. FOLWEILER, managing forester of International Paper Company's lands in Louisiana since 1946, has become director of the Texas Forest Service. He took the place of W. R. White who resigned in March, 1948. A native of Pennsylvania, Mr. Folweiler took his science degree at Penn State in 1923; his master's at Yale in 1934; and his doctor of philosophy in land economics and soils at Wisconsin in 1943.

CEDRIC CRAIN has been appointed International Paper Co.'s Bagpak Division second district sales manager in Atlanta, Ga. Mr. Crain and Richard A. Port, the first district sales manager, are at Bagpak's office, 56 Marietta St.

KIRK SUTLIVE, public relations manager of Union Bag and Paper Corp., Savannah, has been nominated for presidency of Associated Industries of Georgia.

C. J. SCHUELKE is in charge of the new warehouse at 878 Ashby St. N.W., Atlanta, Ga., by Chain Belt Co. The Atlanta sales office is under J. S. Moore.

FLORIDA STATE FORESTER C. H. COULTER (left) is presenting a tree farm certificate for Florida's second largest tree farm—183,075 acres—to P. W. Chestnolvick, Woodland Manager of Southern Kraft Div., International Paper Co. In background are District Forester John M. Bethea (left) and F. H. Robinson, International Paper Co.'s District Forester. The ceremony was at Clarksville where the company made test plantings seven years ago on three plots. On a harrow-prepared plot trees now measure 23 feet tall; on a road grader-prepared plot 19 feet tall; and on an unprepared plot 16½ feet tall.

JAMES L. COKER, president, Sonoco Products Co., of South Carolina, has recently been re-elected a director for that state, of the National Association of Manufacturers.

RICHARD G. COKER, secretary and chief engineer of Sonoco Products Co., Hartsville, S. C., was recently elected vice chairman of the South Carolina State Commission of Forestry.

DEAN B. THATCHER has been named director of industrial engineering at Masonite Corp., Laurel, Miss. He was previously with The Mengel Corp., Sperry Gyroscope Corp. and Bendix Aviation.

R. A. YODER, who had been forester with Hollingsworth & Whitney Co., Mobile, Ala., has become assistant professor of forest management at Oregon State College.

GEORGE HATFIELD, formerly of the Chicago Office of Wheelco Instruments Co., is in charge of a new district office opened by the company at 2204 Fannin St., Houston, Tex., to serve Texas, Louisiana, and New Mexico.

KENNETH YOUNGCHILD, American Cyanamid, and well known in the South for his several years of headquartering at Mobile, has been passing cigars in honor of *GREGORY YOUNGCHILD,* born in November. Gregory comes into the world as the youngest of a well known papermaking family. His father is now at American Cyanamid headquarters in Rockefeller Center, New York.

A SECOND SON, David Turner Warner, was born to Mr. and Mrs. J. W. Warner, Tuscaloosa, Ala., Nov. 25. The father is production manager of Gulf States Paper Corp.

HENRY BORMAN, assistant to the president of Southern Paperboard, Port Wentworth, Georgia, is planning to attend Manhattan's "Paper Week" with Mrs. Borland.

CLAUDE V. HARP, JR., has joined the Houston, Texas, office of The Reliance Electric & Engineering Co., as field sales engineer under Frank A. Denison, district manager.

CARL P. GREEN is new president of new credit union at Hudson Pulp and Paper Corp., Palatka, Fla.

—One of the Men Behind Eastwood Wires . . .

FRANK VAN DYKE

Puts the "Heat" on Wires

As supervisor of single-strand annealling operations, Frank Van Dyke's chief concern is with uniformity of heat treating of warp and shute wires. Here he is checking the traverse adjustment that controls take-up of each wire as it comes from the annealling furnace and goes on the spool. Nine years with Eastwood, Frank knows that every detail is important. It seems like a trifle, but uniformly wound spools are essential to uniformly woven wires.

EASTWOOD-NEALLEY CORPORATION • Belleville, N. J.

International Students Train At Worthington

Some twenty-five students from all over the world have embarked on a six-month technical training course sponsored by Worthington Pump and Machinery Corp. They have started with a complete course in pumping equipment at the Harrison works and will follow through with training in other Worthington plants.

The international student training program, according to S. Riley Williams, vice president in charge of foreign operations, is part of Worthington's effort to create and maintain harmonious trade relations with foreign countries, and is open by invitation to those men from abroad who have special qualifications along mechanical lines.

Students this year are from: Uruguay, China, Chile, Egypt, Cuba, Holland, Siam, France, Mexico and Canada.

Camas Host to Students

Crown Zellerbbach Corp., Camas, Wash., was host to a group of upperclass chemical engineering students of Oregon State College touring the Pacific Northwest in January. At a luncheon for the group, Frank Drumb, resident manager, was speaker, talking on American Industry. A. G. Natwick, assistant resident manager, and Gus Ostenson, manager of paper production, were also speakers.

Rayonier Report

Rayonier Inc., in its report to stockholders for the nine months ended September 30, 1948, shows sales of $47,315,433 and net income of $7,658,443 representing $6.76 earned per share of common stock. This compares with sales of $36,746,539 and net income of $6,083,795 or $5.18 per share, for the first nine months of 1947.

In his letter to stockholders President Edward Bartsch states that the increase in common dividend from a one dollar annual basis to a two dollar annual basis is warranted by continued favorable operating results.

He also says proceedings are underway for the dissolution of the Polson Logging Co., in which Rayonier acquired a controlling stock interest late in 1947. These dissolution proceedings and distribution of assets may require some time; end result will be that Rayonier will receive the physical properties of the Polson Logging Co.

The consolidated balance sheet of Rayonier as of September 30, 1948, shows current assets of $20,666,360 and current liabilities of $6,275,171.

Ross of Canada Expands

Ross Engineering of Canada is building a new $600,000 plant and office at La Salle, western suburb of Montreal, just a little over two years after it moved into its present plant at Verdun, Que., which at that time was expected to be adequate for years to come.

E. I. du PONT de NEMOURS & CO., INC., is owned by 94,901 different stockholders from all 48 states. More than 43,000 holders are women.

HELP WANTED

Technical Supervisor for Vancouver Island Unbleached Kraft Mill. Must have thorough knowledge of Kraft process, and ability and experience to organize and supervise a Technical Department, for process and quality control and development. Must be capable of training personnel and experienced in developing modern, statistical methods for Mill and quality control. Consideration will only be given to those with the necessary background of training and supervisory experience, capable of assuming responsibility. Interview desirable. Apply Box 31, Pulp & Paper, giving all necessary details and salary required.

HELP WANTED

For Kraft Mill on Vancouver Island, Junior Instrument Engineer. Please apply, Box 32, Pulp & Paper.

FOR SALE

75" Single Blade Hamblet Sheet Cutter with 8-roll Feed Table, separate Lay-Boy. Cutter now at Tacoma, Washington. Reply Box 24, PULP & PAPER, 71 Clumbia Street, Seattle 4, Wash.

GRASCO

YARWAY STEAM TRAPS
RUBBER COVERED CONVEYOR BELT
PAPER MILL HOSE
RUBBER TRANSMISSION BELT
LEATHER BELTING
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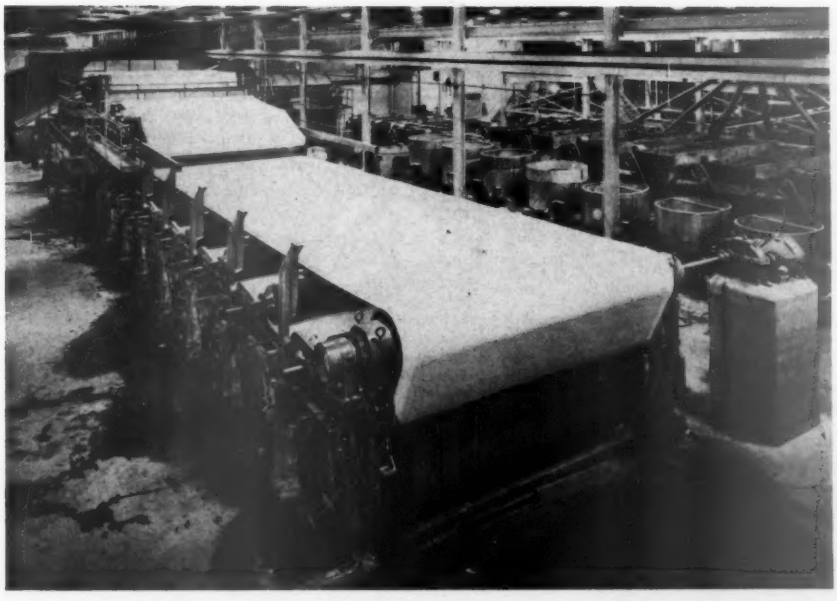
CONDERSITE PULLEY LAGGING
Complete Belt Repair Shop

Write for Prices

GENERAL RUBBER & SUPPLY CO.

101 S.W. First Avenue — ATwater 6565 PORTLAND, OREGON

IN LOS ANGELES—A "BIGGEST"



ONE OF WORLD'S BIGGEST liner board and felt machines, built by Downingtown Mfg. Co., at U. S. Gypsum mill in Los Angeles. All vats shown at this end are stainless steel and also Nofome mix boxes which are directly behind the machine, are stainless steel. Vats have long approach flow inlets. Note suction drum roll. Also observe comparative size of man standing near machine just ahead of dryers.

Here is a picture of the new No. 2 machine at the U. S. Gypsum plant in South Gate, Southern Los Angeles, built by Downingtown Mfg. Co. and one of the two biggest and widest combination felt and liner board machines in the world. A similar machine, also built by Downingtown is in the U. S. Gypsum plant at Clark, N. J.

Harry C. Merritt, vice president in charge of engineering for Downingtown, points out features of this 160-inch trim machine in a recent article such as dryer gears of extra strong stub-tooth design, located inside rear dryer frames and completely enclosed with sight feed lubrication system "built-in." Dryer frames are so designed they are on floor level, well below machine floor level, with framing high enough so a man can walk underneath. Dryer foot walks are located front and rear.

Mr. Merritt described the machine drive as sectional electric with individual drives for suction drum roll, cylinder molds, bottom press rolls and last primary and first main top rolls. Dryers are driven by single motor in center of a line shaft. The 4-drum winder is equipped with 4-motor drive, operating speeds up to 1500 f.p.m. The six presses have pneumatic loading and lifting. Both calenders have motor-driven loading.

R. H. Hayes is works manager and Conrad Thiel is mill superintendent at the South Gate mill.

CHAMPION MACHINES

(Continued from page 41)

more than $720,000, in storeroom materials for maintenance and repair. For raw materials, such as wood and chemicals, the company expended in excess of $6,000,000 in 1947.

In its forestry department, the Pasadena mill gives away a half-million seedlings annually to Forest Farmers of America and 4-H Club boys and girls, and to county agents. In 1947 it planted 1½ million seedlings on its own land and in ten counties, and expects to greatly increase planting in 1948 above this figure. It practices the most cooperative methods of encouraging tree growth on its own lands and those of its neighbors.

In the Pasadena high school, the Champion company cooperates in operating a "university" in which over 100 are enrolled in night courses in blue print reading, papermaking, electricity and evaporation.

For its own use Champion operates its own clay (Kaolin) plant at a mine at Sandersville, Ga., where the highest process of air flotation is used in producing the 125 tons per day which is shipped to Champion's three divisions.

Reuben B. Robertson is president of Champion Paper and Fibre Co., and Reuben B. Robertson, Jr., is executive vice president.

Officers and top personnel at the Pasadena mill, which is titled the Houston Division, include: W. R. Crute, division manager; Stephen Chase, general paper mill superintendent; Glenn H. Smathers, general pulp mill superintendent; Sam Olson, technical superintendent; S. L. Swasey, chief chemist; I. D. Wells, general superintendent of mechanical and power departments; J. K. Kirkpatrick, groundwood mill superintendent;

Chas. W. Dabney, Jr., assistant Champion secretary and division purchasing agent; E. L. Clarke, comptroller; A. M. Coury, industrial relations manager; R. M. Schraub, chief engineer; E. G. Battle, paymaster; Glen Snively, scheduling and sales; C. H. Thomsen, traffic manager; C. Y. Townley, wood department manager, and F. R. Crow, forester.

Industrial Relations Policy

Champion Paper & Fibre Co. employes are not organized by a national union and according to company data, the take-home pay of its employes averages about 10% above that of comparable unionized mills. Unions have lost several attempts to break down the company's industrial relations policies, which Champion management describes as a "cooperative policy" stabilizing future outlook for some 7,000 employes.

The company is still family-controlled as it has been since it was founded in 1894 by Peter G. Thomson, Cincinnati bookseller, and continues now under his son-in-law, Reuben B. Robertson. As the family expands, it has become a custom to take only one member of each branch into the management.

NEW LONGVIEW FIBRE BOX PLANT

Serves Market in Southern California

Longview Fibre Co., for many years with warehouse and distributing facilities for corrugated board and boxes in Southern California, now has a new manufacturing plant in operation, located on a seven-acre site in the Central Manufacturing District of Los Angeles; at the corner of Fruitland and Maywood avenues. It is designed and engineered for prompt service to Southern California customers.

The new plant is 400 feet long and 325 feet wide, contains 130,000 square feet and is built mainly of steel, concrete and glass. Adequate facilities are incorporated for corrugated box manufacture, warehousing and shipping, together with factory and sales offices.

LONGVIEW FIBRE CO.'S NEW PLANT. Top: Corrugated board machine, supplied by S & S Corrugated Paper Machinery Co., is approximately 275 ft. long, produces board 80 inches wide at speeds up to 450 ft. per minute. All electrically operated it is one of largest corrugated machines on the Pacific Coast.

Bottom: Steel and concrete building, 130,000 square feet, housing machine above at 4955 Maywood Avenue, Los Angeles. It has capacity of 140 tons daily.

Main item of equipment is the corruating machine, supplied by S & S Corrugated Paper Machinery Co. Approximately 275 feet long, it produces 80 inch width corrugated board at speeds ranging up to 450 lineal feet per minute. Capacity is 140 tons daily, but in early November, with two shifts, the machine was running two-thirds of capacity.

All electrically operated it is one of the largest corrugated board plants on the Pacific coast, according to A. F. Knaggs, plant manager, and is one of the most modern obtainable. It uses exclusively kraft container board, made in the company's Longview, Wash., pulp and paper mill, which makes 500 tons a day of kraft paper, board and converted paper products.

Purpose of the new plant is to provide better service to customers of long standing in the Southern California area, whose requirements for shipping containers, can be made locally according to required specifications and thus available for prompt delivery.

Longview Fibre boxes are made from virgin West Coast pulp, with distinctive characteristics of lightness in weight and superiority in strength and carrying qualities. The Los Angeles plant will neither be dependent on remote eastern sources for kraft, nor use any jute container board or board produced from waste papers.

A. D. West, sales manager of the new plant, has been for many years manager of container sales for Longview Fibre in Southern California.

GRIFFITH RUBBER MILLS

SINCE
1911

Griffith
RUBBER MILLS

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ROLLS

NO JOB is TOO BIG FOR G.R.M.—48" R/C coating rolls, largest in the West, finished to close tollerance and highly polished surface ready for shipment.

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Cut Sizing Costs

By Preparing Tub Sizings and Coatings from Raw Starch with

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A Highly Purified Enzyme Product

AMYLIQ-Converted Starch Costs Less Than Modified Starch
Use AMYLIQ...Save the Difference

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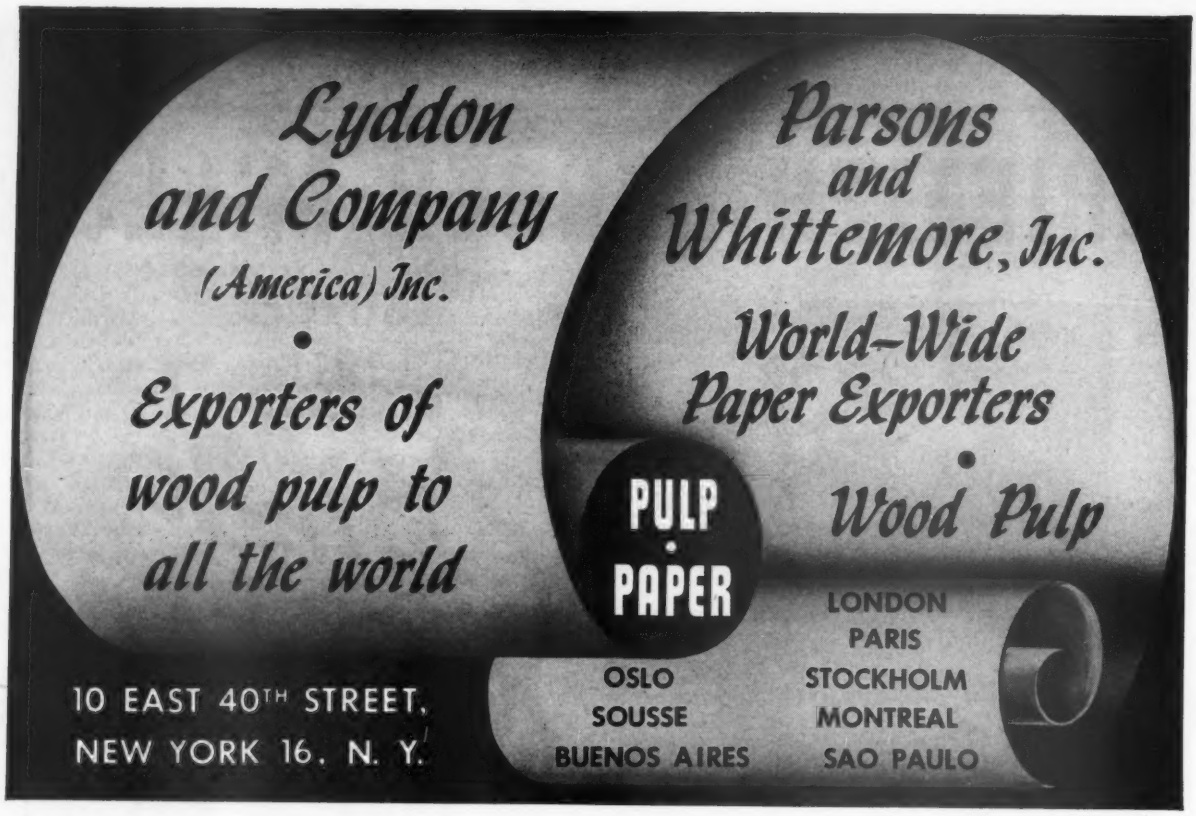

FIBREBOARD MEN

(Continued from page 60)

Zellerbach Corp., principally at Port Townsend.

E. A. Bush, formerly with the Richardson Co. in Ohio, and with many years of experience in back of him is instrument man.

Personnel manager is G. B. McCuish, with many years in this type of work.

Superintendent of the Truckee Timber Division is George Stoodley, formerly logging superintendent, Sacramento Box & Lumber Co., Sacramento, Calif; and timber sale inspector, Red River Lumber Co., Westwood, Calif.

AN UNUSUAL OPPORTUNITY
FOR A
PAPER MILL GENERAL MANAGER

A large pulp and paper mill in the Pacific Northwest recently acquired by new interests, seeks a competent man and General Manager and to assume full charge of entire operation. The mill employs 750 and is currently producing at the rate of 100,000 tons annually.
Consideration will be given to applicants who are successful assistant managers in their present organizations, and who feel that their experience justifies full managerial responsibilities.
The salary offered will be commensurate with the responsibilities assumed and the capabilities of the successful applicant.
All inquiries will be held in strict confidence.
Please give full details—age, experience, salary requirements—in your first letter. Address:

BOX 30
PULP & PAPER, 71 COLUMBIA ST. SEATTLE 4, WASH.

Dr. Pollack Designs Plans For Wood "Leftovers" Mill

There has been no specific U. S. development on a projected 10 to 25-ton pulp mill designed by him in connection with the Northeastern Wood Utilization Council, according to Dr. Arthur Pollack, 1718 Grand Avenue, The Bronx, New York, who designed the mill.

Dr. Pollack visualizes the mill as an outlet for slabs, edgings, trimmings and other wood waste in the field of pulp and paper. It has been contemplated by some observers that such a small mill might be erected near a large lumbering operation provided the site offered water and other facilities coupled with a good market for the pulp. Cost of the mill is estimated at $150,000.

Dr. Pollack was for many years director of development for the West Virginia Pulp & Paper Co.

Company to Contribute To Fund for "Safe" Days

Linking of accident prevention with the welfare of retired employes is the basis on which the management of the Powell River Co. and its plant safety committee have recently inaugurated a unique and far-reaching experiment in industrial relations.

The plan envisages construction of several small housing units for these men and their wives, which will be financed by company contributions, based on non-accident days in the plant.

For each non-accident day throughout the year, the company will contribute to the Retired Employes Building Fund five cents per day for every employe working. Mill, office, and store employes are included. This is the foundation on which the new housing project will be launched.

Paul E. Cooper Heads Western Branch of CPPA

Paul E. Cooper, president of Pacific Mills, Ltd., Vancouver, B. C., has been elected chairman of the western branch, Canadian Pulp and Paper Association, succeeding J. A. Young, who had finished out the term of Benton R. Cancell following the latter's departure for the east to join St. Regis Paper Co.

Members of the executive committee are: Harold S. Foley, president, Powell River Co.; Prentice Bloedel, president, Bloedel, Stewart & Welch; Lawrence Killam, president, B. C. Pulp & Paper Co.; D. G. Stenstrom, coast representative, Columbia Cellulose Co.; Hugh M. Lewis, vice president and general manager, Sorg Pulp Co.; Logan Mayhew, vice president, Sidney Roofing & Paper Co., and J. A. Young, vice president, Pacific Mills.

Use

BSM-11

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SLIME CONTROL
WITH ONE PROVEN PRODUCT

Pacific Coast Supply Company

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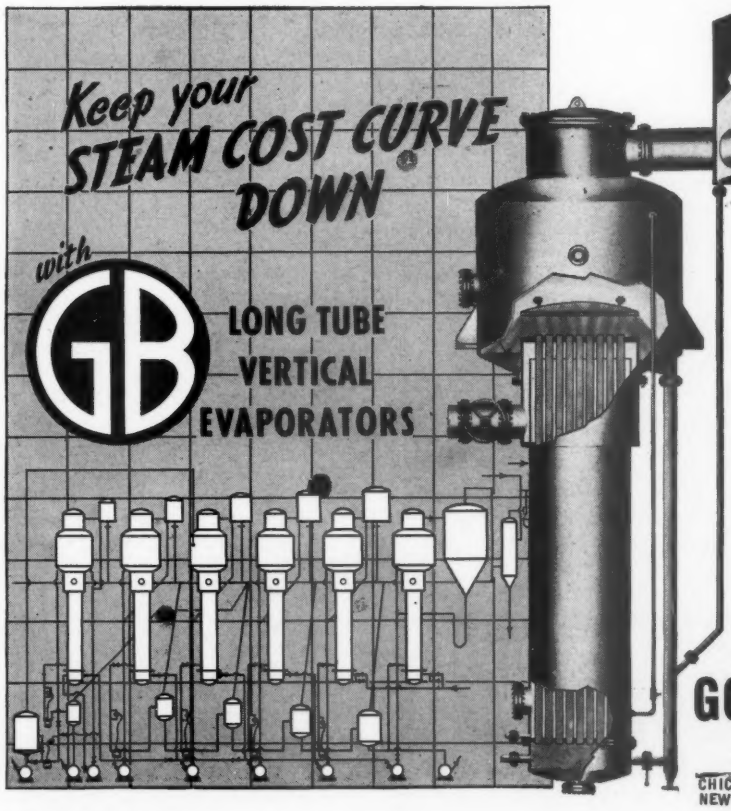

If your black liquor evaporators are obsolete, your steam costs are probably abnormally high, even for these days. Only by increasing the number of effects with an efficient condensate flash removal system can you decrease evarporation costs to offset increased steam costs. Recent Goslin-Birmingham Multiple Effect Black Liquor Evaporator installations are paying for themselves through *savings in steam.*

Write, wire or phone for a skilled representative to call and discuss your problems. No cost or obligation, of course. Literature on request.

GOSLIN-BIRMINGHAM
MANUFACTURING COMPANY, Inc.
Birmingham 1, Alabama

CHICAGO: F. M. deBeers and Associates, 20 N. Wacker, Chicago, Ill.
NEW YORK: Goslin-Birmingham, 350 Madison Ave., New York 17, N.Y.

Pusey & Jones Men Give Kalamazoo Program

Recent equipment developments for board machines, as well as other paper-machines, were told by Philip H. Goldsmith, Pusey & Jones development engineer, before the December dinner of the Michigan Superintendents Division in Kalamazoo. He told of the Flow-Spreader, a dryer not yet in commercial production, and a pneumatically-operated press. E. A. Hodge, vice president, and P. Andrew Jackson, engineer, both of Pusey & Jones Corp., aided him.

Swenson-Esco Headquarters

Whiting Corp. (Canada) Ltd., including Swenson Evaporator Co. Divisions, and also representatives in Eastern Canada for Electric Steel Foundry Co., of Portland, Ore., has moved to offices in a new building near Eaton's College St. Store in Toronto, Ont.

According to word from Roy A. Garnett, manager, the new address is 47-49 Laplante Avenue, Toronto 2, Ont.

PLANT ENGINEER

Large sulphite pulp and paper mill experience, desires consideration for equipment sales connection. Reply Box 29, PULP & PAPER, Seattle 4, Wash.

THESE PICTURES TAKEN BY PULP & PAPER at recent Hamilton, O., meeting of Miami Valley Superintendents Division.

HAROLD LEIGHTON (top left) is now Chairman of the Miami Valley group and he is Assistant Superintendent at Beckett Paper Co. in Hamilton. WILLIAM REIGERS (top right), Secretary of the Division, is Finishing Room Supt. at Beckett Paper Co.

Below are LUTHER THIEL (left) and JOHN DOW, both sales engineers with Shartle Brothers of Middletown, Ohio.

Martin Deggeller Joins Harbor Plywood Co.

Martin Deggeller, with Rayonier for 12 years, more recently as vice president, director and woodlands manager, has been elected president and general manager of Harbor Plywood Corp., Hoquiam, Wash.

New Gaylord Plant

Construction began in January on a new $2,000,000 bag plant by the Gaylord Container Corp., Bogalusa, La. The new plant is part of a previously announced expansion program and will provide employment for 150 to 175.

Thorold Mill Adds Steam

An addition to the steam plant of Ontario Paper Co. at Thorold, Ont., is currently being made. A 50-ton hopper is being installed for the Nuveyor ash conveyor system. A new Roberts grinder is being installed.

NEW ZEALAND'S first wood pulp mill, which is to be built at Maraltai (near Aukland) by a private company, is expected to begin production in 1950. Initial output will be about 10,000 tons annually, probably unbleached sulfate. We previously reported plans to establish a government pulp mill at Muruparu (near Aukland) by 1952.

Ten "Stock-Makers" ready for delivery. Five on repeat orders, five for new customers.

Wide acceptance of the "Stock-Maker" in a great variety of beating and refining applications continues to increase our volume of production.

For this we are indebted to our many long standing as well as more recent customers whom it has been our pleasure to cooperate with in their use of Mordens.

We look forward to the opportunity of assisting your mill toward further improvement in stock treatment through the use of Morden "Stock-Makers".

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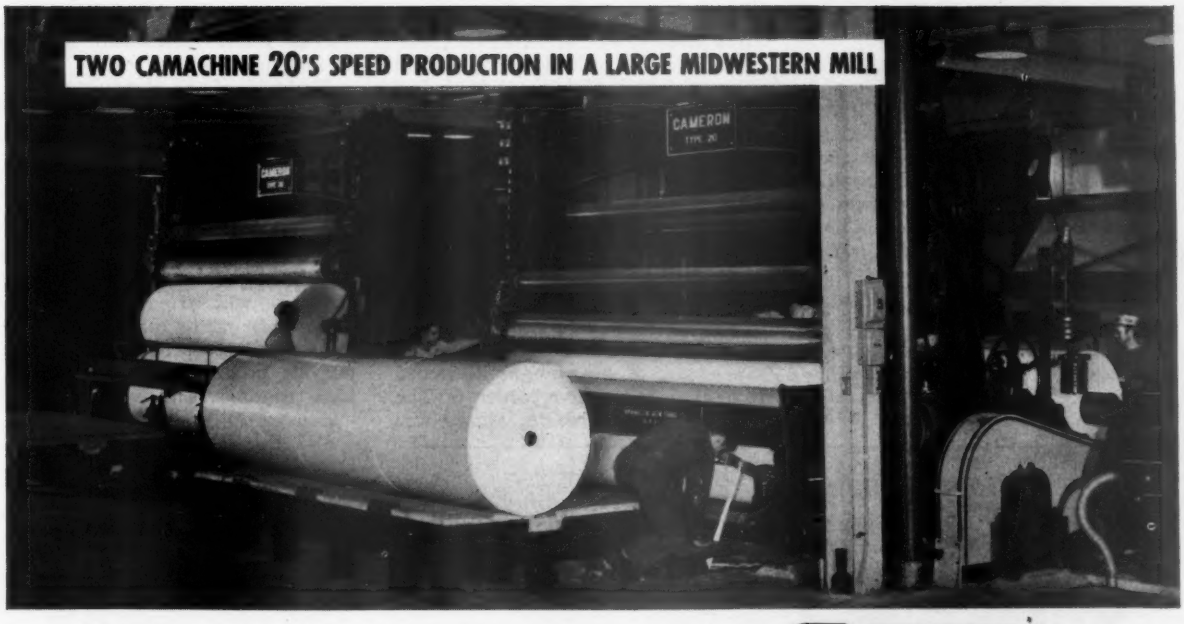
TWO CAMACHINE 20'S SPEED PRODUCTION IN A LARGE MIDWESTERN MILL



EXCLUSIVE new Camachine mill winder features include: pneumatic brake on drive and idler roll; motor-driven riding-roll lift and roll ejector; pneumatically controlled pressure on cutter units.

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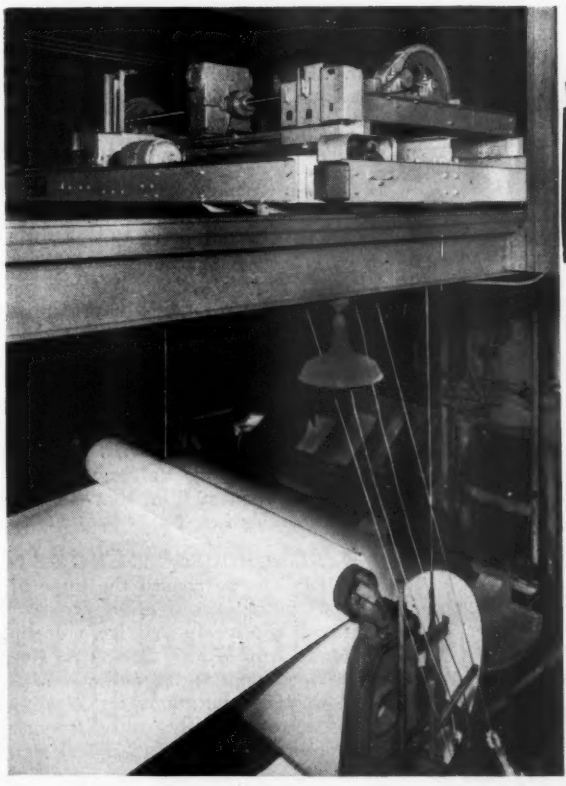

What kind of crane do you need?

Ederer will custom-build it to your job requirements . . . !

This fixed-hoist roll handling crane was engineered and constructed to the exact job requirements of the paper mill where it is in service. Whatever the lift, span, capacity, speed or special limitations of space — Ederer can custom-build it — even to building one-half a crane and adding the other half later! An Ederer engineer will be glad to recommend "job required" materials handling equipment for your operation . . . no obligation, of course.

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Xeroprinting Result of Electrostatic Process

A laboratory press model recently demonstrated in New York City, the new process of xeroprinting. This is a step beyond xerography which the Battelle Memorial Institute of Columbus, O., has developed in collaboration with the Haloid Co. of Rochester, N. Y., manufacturer of photographic papers.

In xeroprinting electrical attraction causes a resinous powder to jump from a charged plate onto paper running through the press at web speed of 600-1,200 ft. per minute.

Xerography, the forerunner of this process, was invented by Chester F. Carlson of New York, a patent attorney and physicist. According to the Battelle Institute, the entire process of xerography can be incorporated in a portable xerocamera with which you will be able to snap a picture and pull out a print in a few seconds.

Foxboro Announces Unique Multi-Record Dynalog

Shrouded in deep secrecy during the long period of its development and field testing, the multi-record dynalog electronic recorder of The Foxboro Co., Foxboro, Mass., was exhibited for the first time at the recent I.S.A. Instrument show in Philadelphia.

Features of the dynalog are explained in illustrated bulletin 428, which will be sent on request to the Foxboro Co.

Joins Wallerstein Co.

Frank A. Taberski has joined Wallerstein Company, Inc., 180 Madison Ave., New York City. Mr. Taberski will promote application and sales in the paper field and other industries of AMYLIQ, an enzyme product for preparing sizings, coatings, and adhesive from starch.

Mr. Taberski was chief chemist in the coating department of Imperial Paper & Color Corp. He is a graduate of Cornell.

Butler Division Expands at San Francisco

A new $500,000 warehouse and headquarters building will be the first major expansion move for the Pacific Coast Paper Co., San Francisco, division of the Butler Paper Co., Chicago, in its 44 years of operation.

Elect Officers

The Association of American Wood Pulp Importers have elected James Donaldson, president; S. G. Blankenship, vice president; George N. Dutcher, secretary; V. Ramsay, treasurer and Rolf G. Westad, director.

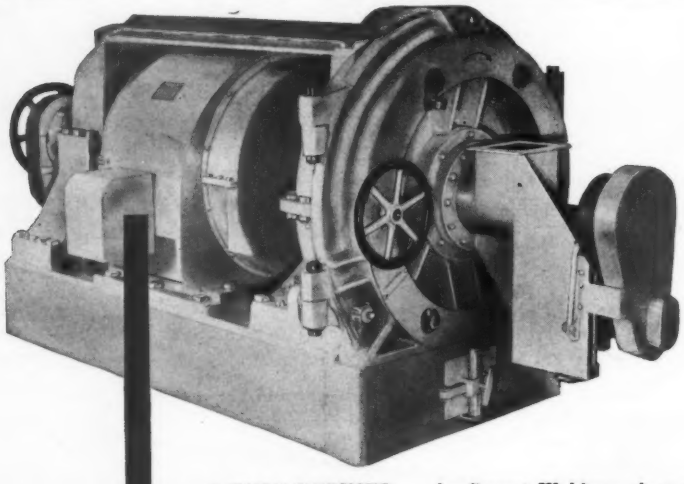
New Rogers Machine

A new knife grinder of massive proportions, with extra heavy-duty construction throughout for precision grinding of knives up to 160", is now in production by Samuel C. Rogers & Co., pioneer manufacturers of automatic knife and saw fitting machinery, Buffalo 11, N. Y.

Downingtown Catalog

A catalog recently completed by Downingtown Manufacturing Co., entitled, "Downingtown - Wiener Stock Regulating Valves," is available on request from that company at Downingtown, Pa.

WESTINGHOUSE ELECTRIC CORP. has purchased the huge 57-acre Sunnyvale Works, which it leased two years ago from Joshua Hendy Iron Works. Robert A. Neal, vice president and general manager of western operations for Westinghouse, revealed that purchase price of the plant—largest electrical manufacturing plant in the West—is $3,472,151.



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Rugged and precision-built, a Sprout-Waldron Refiner weighs over 15,000 lb. Yet, required installation space is only 10'3¼" x 4'9½" x 5'2¾".

Micrometer adjustments and variously designed fillings give positive and accurate operational control at all times.

Wherever wood pulp refining is a vital operation—from defiberizing semi-chemical to hydrating fully cooked pulps—consider Sprout-Waldron Refiners.

Other Sprout-Waldron machines in the Pulp and Paper Mill Industry are:

(1) Double Agitated Mixers—designed especially for efficient and economical pulp blending.

(2) Rotary Knife Cutters — engineered for the reduction of asphalted papers, cooked flax, bark, etc.

(3) Attrition Mills—outstanding for defiberizing rags and intimate blending.

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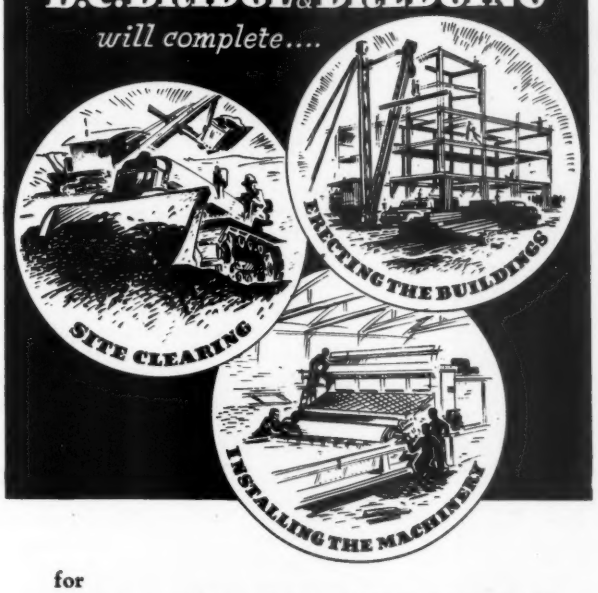

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You can't figure felt costs from the price lists of felt manufacturers. Use your own felt book.

Felt, Steam and *Time* are the only direct manufacturing costs from the press to the winder of your machine.

The more water you remove at the felt the less steam and the less time you need at the driers. Result—more tonnage at less cost. From the thinnest tissue to the heaviest board there is a Hamilton Felt that will cost less per ton of production.

This statement takes in a lot of territory but it is subject to proof in your own mill and to check and double check in your felt book.

SHULER & BENNINGHOFEN

HAMILTON, OHIO

Miami Woolen Mills, *Established 1858*

Hamilton Felts

MEETING ON NEWSPRINT

U. S. Tariff Restricts Paper Quality

Canadian mills can produce better quality newsprint for the United States market, but they are prevented from doing so by United States tariff regulations, D. W. Ambridge, president of Abitibi Power & Paper Co., Toronto, declared at a conference of 35 U. S. publishers and 25 Canadian newsprint manufacturers in Milwaukee recently.

During the conference the question of newsprint quality was introduced and it was stated that advertisers were becoming more critical of reproduction. Suggestions were made also for increasing use of color in newspapers.

Mr. Ambridge explained that the only newsprint admitted into the United States duty free is so-called "standard newsprint," based on the quality of 1930.

Canadian manufacturers of newsprint had spent $145,000,000 in three years on improvements in operations, but only a small amount could be spent on quality betterment since the major market, the United States, was closed to improved grades except on a duty-paying basis.

Some Canadian manufacturers are critical of the U. S. regulations on the ground that the definitions of standard newsprint have not kept pace with technical developments in the industry.

R. C. Doane, vice-president of Canadian International Paper Co., said that the regulations were apparently not inflexible as one change had been obtained during the past few years.

A publisher spokesman predicted the U. S. will need a minimum of 4,941,000 tons of newsprint in 1950 and somewhere between 5,437,000 and 6,201,000 tons by 1960 and a Canadian spokesman said those estimates are too low; the 1948 U. S. supply will reach 5,230,000 tons; there will be an additional 195,000 tons for the U. S. next year, 100,000 tons of it from Canada, but there will still be a shortage; and the Canadian mills alone can meet the increased demand predicted by the publishers up to 1960.

The publishers' estimates of newsprint demand were presented by Harold S. Barnes, acting director of the Bureau of Advertising.

R. M. Fowler, president of the Newsprint Association of Canada, presenting an elaborate study of world supply and demand, told the publishers their estimates were too low, because they did not take into account the backlog of orders and unfulfilled demand existing in 1947, the base year for the Bureau study. Referring to the 1950 publishers' estimate, Mr. Fowler said: "Gentlemen, you've already got it," and read the anticipated consumption figures for this year.

In basketball, as in papermaking, competent action at critical moments wins out. Team work pays off. Experience counts — and never more than in making the sort of felts your team needs.

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Packaging Men Elect New Officers

At its sixteenth annual meeting held recently in New York City the Packaging Machinery Manufacturers Institute elected H. Kirke Becker, of Peters Machinery Co., Chicago, president. Other officers elected were: John P. Corley, Miller Wrapping & Sealing Machine Co., Chicago, vice president; Edward G. Kuhn, Consolidated Packaging Machinery Corp., Buffalo, vice president.

Newly elected directors are: William B. Bronander, Jr., secretary and general manager, Scandia Mfg. Co., North Arlington, N. J.; W. E. Coughlin, vice president, Pneumatic Scale Corp., North Quincy, Mass.; George A. Mohlman, president, Package Machinery Co., E. Longmeadow, Mass.; and Louis R. Muskat, president, Triangle Package Machinery Co., Chicago. H. L. Stratton is secretary-treasurer of the Institute which has offices at 342 Madison Avenue, New York City.

The Packaging Machinery Manufacturers Institute will hold its spring meeting May 9, 1949, at Hotel Dennis, Atlantic City, N. J.

Perma-Rap New Product of Mid-States Gummed

Perma-Rap, a new waxed creped kraft material, was recently announced to the trade by Mid-States Gummed Paper Co.

Nurseries can use it in protecting plants, shrubs, etc., wrapping it around the plant, thereby making it easier to transport and, at the same time, holding in moisture. It may also be laid below the top soil in order to keep moisture from draining away.

As a packaging material Perma-Rap can be used as a bag, container, liner and wrapper. It may be used as a building material. Used as insulation from moisture in cellars and basements, it can be laid outside of concrete foundations, both on sides and underneath. The material will withstand sun, rain, snow and dirt.

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An example of Proven Design

Browning Diesel Locomotive Cranes have:

★ ***Multiple Bolster Springs in each truck.***

All-Welded Carbody and travel gear frame.

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BROWNINGS rotate fast with minimum sway, give you maximum production with bucket, magnet, grapple or hook. This stable crane assures accurate load spotting.

And with a Browning you *see* while you swing. True full vision from the cab is another feature of the M-Series Diesel Locomotive Cranes.

Follow this series of ads. You'll see why Browning *Proven Design* means high production and economical operation. Write for illustrated folders on locomotive cranes, wagon cranes, truck cranes and shovels.

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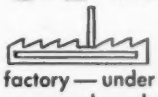

2. After laboratory specification, Erkote Insulating Mastics are manufactured in *our own* factory — under the watchful supervision of skilled chemical engineers and production men.

3. Finally, Erkote Insulating Mastics are applied and maintained by *our own* crews — made up of highly trained insulating men with many years' experience on all types of industrial installations.

This *complete* control from laboratory to finished job means that we assume *complete* responsibility for every ERKOTE installation.

Result: The 5-year guarantee . . . *PLUS* unequalled performance and economy for thousands of satisfied customers.

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Represented in the South by
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EBASCO EXPERTS ARE ON THE JOB

Under normal conditions, building a newsprint mill from inception to operation (in a limited time) is a complex undertaking. Imagine then, the problems you would encounter in building the *first newsprint mill in India!*

For instance: the hot climate —necessary water supply for the mill—transportation —supply and storage of bamboo and salai —selection of equipment and machines. All are problems that demand careful analysis and solution by a *team of experts*, working together.

That's why the National Newsprint & Paper Mills, Ltd. turned the job over to EBASCO.

In EBASCO you have a single organization equipped with the specialists and experience to do the whole job—including design and construction, purchasing, inspection and expediting of materials and equipment, putting the mill into operation.

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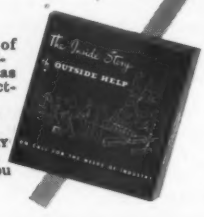
Expansion? Modernization? Building an entirely new plant? Call on EBASCO. You'll find its team of seasoned consultants, engineers and constructors will get your job done quickly and efficiently.

If you'd like a complete outline of EBASCO's individualized services as engineers, constructors, and business consultants, write for our booklet THE INSIDE STORY OF OUTSIDE HELP. We'll send it to you promptly.



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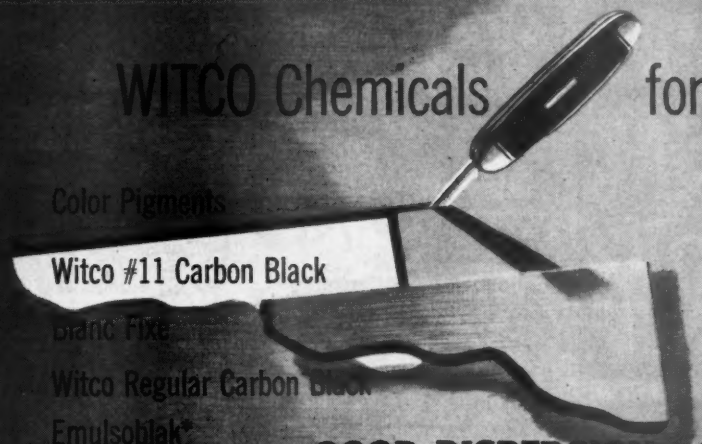
WITCO Chemicals for Paper



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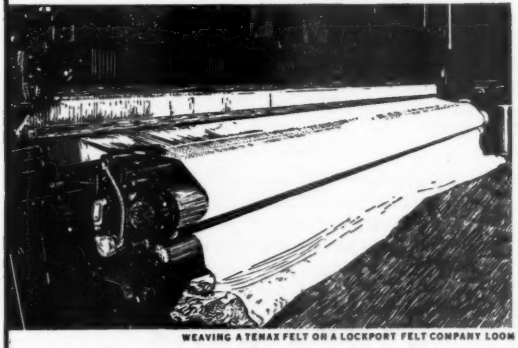

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The skill and experience of more than 50 years are woven into every Tenax Felt made to serve the paper industry.

LOCKPORT FELT COMPANY

NEWFANE • NEW YORK

97% Sodium Sulphate

(GUARANTEED ANALYSIS)

TRONA SALT CAKE

a quality product

AMERICAN POTASH & CHEMICAL CORPORATION

3030 W. 6th Street Los Angeles 54, Calif.

LOOK TO SUMNER FOR WOOD ROOM EQUIPMENT

Sumner "No-Man" Log Carriage for Pulp Mill Wood Rooms. Special Air-Dogs and completely controlled by sawyer.

Shown above is just one of the many items in the varied SUMNER LINE of fine machinery. FOR

PULP, PAPER AND BOARD MILLS

OTHER MAJOR PRODUCTS INCLUDE:

Log Hauls	Drag Cutoff Saws
Log Kickers	Deck Chains
Log Stops	Roll Cases
Log Loaders	Feeding Devices
Transfers	Refuse Hogs
Band Mills	Feed Engines
Circular Cutoff Saws	One-Man Carriages
Hydraulic Slab Barkers	
Hydraulic Round Log Barkers	
Round Log Chippers	
Veneer Chippers	

Many of the leading mills are equipped with our complete line, and it is doubtful if there is a Pulp, Paper or Board Mill on the Pacific Coast, either in the United States or Canada, which does not have some SUMNER equipment in its Wood Room.

SUMNER IRON WORKS Since 1892

EVERETT, WASHINGTON

In Canada: CANADIAN SUMNER IRON WORKS LTD., VANCOUVER, B. C.

EXPORT DEPARTMENT: FRAZAR & HANSEN LTD.
301 Clay Street, San Francisco 11, California, U. S. A.

Back for More

At the end of the late war, one large newsprint concern had two Bauer Pulpers operating on screen rejects in two of its mills. Today those two mills have a total of 10 machines, and five additional Bauers have been ordered for a third mill. *Back for more.* These machines were purchased with a first-hand knowledge of what their returns would be. The extra quality of the fiber produced gives them a better sheet and each Pulper is turning out several hundred dollars' worth of valuable pulp each day from screenings.

A felt mill used five Bauers as refiners until 1947. Today they have twelve Pulpers fiberizing semi-chemically cooked chips as a partial furnish for their enlarged facilities. *Back for more!*

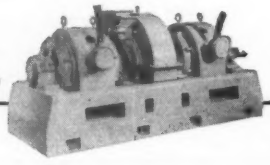
A towel and napkin plant installed one Bauer Pulper in January. By March they had purchased a second and were so pleased with results that by September they ordered 4 more. *Back for more!*

Satisfied users? YES! That's what brings them *BACK FOR MORE!*

For the production of long, pliable, free fiber from a wide variety of raw material sources for almost every grade of finished product, the Bauer is outstanding. The repeat orders above confirm that statement. Address your inquiry for detailed information to

THE BAUER BROS. CO.
SPRINGFIELD, OHIO

Bauer



Canadian Western To Start Construction

Canadian Western Lumber Co. at Fraser Mills, B. C., plans to install a chipping plant to produce wood chips for pulp mills. Engineer Arthur Pearson is working out the design and it is understood that the plant will be located adjacent to the lath mill, which is to be discontinued although its equipment will be retained for the present.

President Henry J. Mackin states that preliminary work in clearing ground for the company's proposed pulp and newsprint mill at Duncan Bay, near Campbell River, on Vancouver Island, may be started in January.

Swan, Rhodes & Wooster, Vancouver consulting engineers, are carrying out field survey work in connection with this project. In planning the engineering phases of the mill itself the Canadian Western organization has advisory and engineering cooperation of the Crown Zellerbach Corporation.

Newport News Shipbuilding To Assist Sandy Hill

Sandy Hill Iron & Brass Works of Hudson Falls, N. Y., and Newport News Shipbuilding and Dry Dock Co. of Newport News, Va., will collaborate in manufacture of industrial equipment for pulp and paper mills. The arrangement will provide customers with benefits of engineering and manufacturing facilities of both companies.

First collaboration between the Hudson Falls and Newport News companies came during World War II. Sandy Hill built many of the Johnson Stearn Anchor Handling Gear, better known as winches, which were used on the LST landing craft.

Under the present arrangement, castings too large for Sandy Hill, and machining beyond the range of tools in the Hudson Falls shop, will be handled by the shipbuilding firm.

New Location for Dixie Cup

The Los Angeles office and warehouse of the Dixie Cup Co. has been moved to larger quarters at 2600 East 12th St., Los Angeles 23, Calif., in order to provide better service for customers in the Pacific region.

CANADIAN SUMNER IRON WORKS, Vancouver, B. C., has shipped about $400,000 worth of pulp mill machinery to Papermakers' Proprietary, Ltd., at Burnie, Tasmania.

A STEBBINS LUMP SUM CONTRACT IS AN INVESTMENT IN

WHETHER the contract covers one chest or tank lining, or all the corrosion or alkali resistant linings for the entire mill, it is Stebbins responsibility to provide a dependable and satisfactory job that assures continuous operation.

Sixty-four years experience in designing, installing and servicing linings in pulp and paper mills is back of this contract.

Thousands of successful installations located on this continent and abroad provide tangible evidence of reliability.

Think twice before investing in linings —the wrong one can prove very costly— be safe, specify Stebbins—and have no regrets.

Stebbins Engineering Corporation
TEXTILE TOWER SEATTLE 1, WASHINGTON

Union Pacific Issues Handy Book on Rates

A handy booklet for traffic and shipping agents and others is a new booklet prepared by Union Pacific Railroad entitled "Memorandum of Increased Rates and Charges."

A map of the U. S. folds into the booklet which shows boundary lines of various increase territories. This is an outstanding feature of the booklet. Rate tables, geographical tables, commodity tables, etc., are among statistics shown in the 62-page book available free by writing to Freight Traffic Dept., Union Pacific Railroad, 15th and Dodge, Omaha, Neb.

Running Count Recording Instrument Developed

A new recording instrument, known as the Running-Count Recorder, has just been anounced by The Bristol Company, Waterbury, Conn. The newly developed recorder plots on a circular chart, a curve of the number of operations against time. It records the total count of intermittent operations and the time at which each one occurs, and is used on producing operations or number of pieces produced.

Combustion Engineering And Superheater Merge

Two power equipment manufacturers, Combustion Engineering Co., and The Superheater Co., have merged under the name of Combustion Engineering — Superheater, Inc.

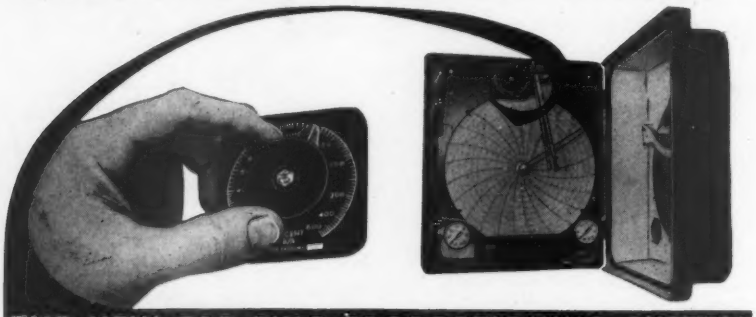
Combustion was founded in 1914; subsequently absorbed other companies, including the Heine, Walsh-Weidner, Casey-Hedges and Ladd boiler manufacturers. Two of these started in 1884. The Superheater Co. was organized in 1910.

Plants owned by the two companies are at Monongahela, Pa.; Chattanooga, Tenn.; Chicago; East Chicago, Ind.; and St. Louis, with subsidiaries in Canada, England and France.

Officers of the new company include Frederic A. Schaff, chairman of the board and vice chairman of executive committee; Samuel G. Allen, chairman of the executive committee; Joseph V. Santry, president; Martens H. Isenberg, executive vice president; and Harold H. Berry, vice president in charge of finance.

BARTRAM PAPER PRODUCTS, LTD., Vancouver B. C., manufacturers of bags and paper specialties, have opened a new packaging division.

A TWIST OF THE WRIST
CHANGES SLUSH STOCK PROPORTIONS



THE NEW F&P PULP PROPORTIONING SYSTEM

(1) Eliminates Head Boxes

(2) Eliminates Pulp Return Lines

(3) Provides "Basis Weight" Control

(4) Saves Floor Space

(5) Records and Totalizes Pulp Flow

Fischer & Porter INTEGRATED control systems start at the paper machine and, from the measurement of its speed, control pulp flow rate. Stock chest level . . . chemical to mechanical pulp ratio . . . size . . . color and filler flow rates are all "tuned" to exact proportion by a simple TWIST OF THE WRIST.

Write for technical bulletin "New Developments in Pulp and Paper Mill Instrumentation."

NORTHWEST ENGINEERING REPRESENTATIVES
FARNES & MARTIG, Inc.
PORTLAND 14, OREGON

FLOWRATOR TRADE MARK **FISCHER & PORTER CO.**
HATBORO, PA. Dept. 9M-8P

Pusey & Jones Issues 100th Anniversary Book

Pusey & Jones Corp. has published an anniversary book, entitled, "A Hundred Years A-Building." The book combines the company's history, with a review in pictures of outstanding machine installations of 1947 and 1948.

The history is handled in separate, selected stories flavored with the color. One tells of early struggles of Joshua L. Pusey and John Jones, the founders, who accepted orders for two complete paper machines in 1867. There is an account of a miniature machine built for the King of Siam which produced paper from a variety of materials including banana fibers.

Traffic Flow Study

The State College of Washington in cooperation with the Office of Domestic Commerce, U. S. Department of Commerce, has recently published a 242-page traffic flow study, "Interregional and Intraregional Traffic of the Mountain-Pacific Area in 1939." It is available at $2.00 per copy, from J. A. Guthrie, director, Bureau of Economic and Business Research, State College of Washington, Pullman, Wash. The report presents, for the first time, state-to-state traffic flows by individual commodities or commodity groups.

Pioneer Firm Expands Los Angeles Operations

Wilson & Geo. Meyer & Co., Pacific Coast distributors of agricultural and industrial chemicals, is constructing a $150,000 warehouse and office in the heart of the Los Angeles manufacturing at District Blvd. and Gifford Ave. to serve customers in Southern California, Arizona, Utah, Colorado and New Mexico. Activities there are supervised by Tom W. Harris, vice president.

Bulletin Issued

Bulletin 3-SB of the Shártle Bros. Machine Co., Middletown, Ohio, describes the Selectrap which, in conjunction with a disintegrator, salvages bundles of partially slushed fiber as well as fiber adhering to match sticks, rubber bands, cellophane, and other varieties of trash. Manufacturer states that this process usually reclaims sufficient fiber to amortize the cost of equipment in a surprisingly short time. Selectraps are built in two sizes with maximum capacities for 75 and 150-ton systems respectively. Copy of bulletin sent upon request.

Open Eureka, Calif., Plant

Electrical Construction Co., 2147 N.W. Thurman St., Portland, Oregon, has opened a branch plant, in Eureka, Calif., at Broadway and Harris Streets. It equips wood mills of all kinds. Their plant phone number is 3998.

TENAX FELTS SERVE THE PAPERMAKERS is the title of an attractive booklet issued by Lockport Felt Co. divided into four chapters on history of paper, history of the Lockport Felt Co., founded in 1891, how felts are made and on felt quality.

A NEW CALCO Technical Bulletin No. 804, "The Properties and Applications of Ultramarine Blue," has been announced by the Calco Chemical Division, American Cyanamid Co. The paper discusses the early history of the natural color pigment and the introduction of its artificial counterpart. It discusses the complex composition of Ultramarine Blue, its chemical and physical properties, as well as the theories which have been advanced to account for its blue color. A copy may be obtained through your Calco representative or by addressing the Advertising Department, Calco Division, American Cyanamid Co., Bound Brook, N. J.